















# I N Q U I R Y

INTO THE

CAUSES WHICH PRODUCE,

AND THE

MEANS OF PREVENTING

D I S E A S E S

AMONG

BRITISH OFFICERS, SOLDIERS, AND OTHERS

IN THE

W E S T I N D I E S.

CONTAINING

OBSERVATIONS ON THE MODE OF ACTION OF SPIRITUOUS  
LIQUORS ON THE HUMAN BODY;

ON THE USE OF MALT LIQUOR,  
AND ON SALTED PROVISIONS;

With REMARKS on the most proper Means of preserving them.

A L S O

N O T E S,

RELATING TO SOME PARTICULARS IN THE BRITISH  
ARMY IN IRELAND, AND THE WEST INDIES.

By JOHN BELL, M.D.

MEMBER OF THE ROYAL MEDICAL SOCIETY OF EDINBURGH,  
PHYSICIAN IN LONDON, AND

FORMERLY SURGEON TO THE LATE NINETY-FOURTH, AND TO  
THE FIFTH (OR NORTHUMBERLAND) REGIMENT OF FOOT.

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Si quid noviti rectius illis,  
Candidus imperti; si non, his utere mecum.

HGR. Ep. vii. Lib. i.

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L O N D O N:

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M.DCCC.XCI.

## E R R A T A.

P. 8. line 10.—for *nor*, read *not*.

P. 17. line 15.—after *was*, read *nearly*.

P. 46 line 7.—after *subject*, read (*and to others connected with it*).

line 8.—for *its* read *their*.

P. 51. line 1.—for *are* read *is*.

P. 56 line 8.—after *converation* add *may*.

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The Reader is requested to excuse an oversight, which extends through the First Section, to p. 39.—The Running Titles should have been, agreeably to the Title of the Section—

*The Use of Ardent Spirits a Cause of  
Mortality among Soldiers in the West Indies.*



TO HIS GRACE

H U G H,

DUKE OF NORTHUMBERLAND, K. G.

&c. &c. &c.

LIEUTENANT-GENERAL OF HIS MAJESTY'S FORCES,

As a Mark of Respect

for his Character as a Soldier,

honoured and esteemed by every Man who has had the

Happiness to be under his Command;

and

as a Tribute of unfeigned Gratitude

for personal Favours conferred in a Manner

worthy of a Nobleman,

The following Pages are inscribed,

by his Grace's

most devoted

and faithful humble Servant,

JOHN BELL.



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## P R E F A C E.

THE subject of the following pages does not afford scope for the display of much ingenuity; but if it is not of a very splendid, it is of a very important nature, and is well entitled to the attention equally of the statesman and the physician. While I was in the army, I frequently had in view to publish a work of this kind, as I thought it was much wanted, from having observed the little attention which is paid to preserving the health of soldiers, compared with that which is bestowed on the navy. But what was often intended was never executed; and on leaving the army, and entering into private practice, the design was laid aside. A few months ago, however, happening to be present at the inspection of the guards by his Majesty in Hyde Park, and being informed

of the quarter to which, at that time, they were destined, I felt some emotions of pity, of sorrow, and indignation at seeing so fine a body of British soldiers doomed, as I thought, to destruction, not by the enemy, nor even by the climate they were to encounter, but by causes which we have it in our power to remove, and which ever have been and ever must be destructive to the army of this country, whether in peace or in war. I therefore resumed my intention, and hastily drew up a memorial on the causes of disease among soldiers in the West Indies, which Lieutenant Colonel Lenox was so kind as to offer to present to the Duke of Richmond, who as Master General of the Ordnance ought to be, and commonly is considered as being at the head of the army, while there is no Commander in Chief. But, about that time the convention took place with Spain, and it was thought that the occasion was past which might render such a representation necessary. However, the subject having been again started was pursued, and I now offer the following observations to the public, from a motive which cannot be censured, an earnest desire to preserve the health and lives of the British army, and to promote the interests of my country.

I avoid,

I avoid, as much as is possible, any professional phrases, or entering into any medical disquisition, farther than making a few general observations which may tend to elucidate my subject to every reader. But the nature of it is such, that to treat it with perspicuity, or to impress the importance of it on the mind of the reader so forcibly as I desire, I shall perhaps on many occasions be obliged to have recourse to repetition.

Those who are fond of ascribing great events to causes of proportionate magnitude, will often, in their researches into those causes, be surprised to find on what apparently unimportant circumstances the life of an individual, and even the fate of an empire may depend. To those persons the subject we are about to consider, may appear deserving of very little attention. Whether it ought or ought not to be viewed in that light, let the following observations determine.

Success in war often depends on circumstances, which appearing of a trivial nature, are frequently overlooked; but inattention to those circumstances may often lay the foundation for much serious regret, both to a minister and to the state. The bad quality of the powder on board of Admiral Byron's fleet,

fleet, in the engagement off Grenada, in the late war, was feelingly lamented and reprobated in the House of Commons; and, at that time, it was confidently asserted, that, owing to this cause, we lost an opportunity of disabling the enemy, and of saving Grenada to this country. Had more attention been paid to the quality of the powder, it is not very difficult to conjecture, what might have been the consequences to this kingdom of the Admiral's engagement with the whole of the French naval power in the West Indies. It is now generally believed, that when Sir Charles Hardy, with an inferior force, retreated from the combined fleets of the house of Bourbon, the enemy was in such a wretched sickly state, that had a change of wind, or any other accident, forced the British admiral into an engagement, which in the circumstances of his country at the time, it was perhaps his duty to avoid, it might have proved to be the proudest day for England since the defeat of the Armada. Had the admirals of France and Spain been more attentive to the means of preserving the health of their men, they might have destroyed where they only bravadoed, and might have given a blow to the naval power of this country,

country, from which, during the war, we could not have recovered.—Had the real state of the effectual force for the defence of Jamaica, in the years 1779, 1780, and 1781, been known to our enemies, they must have attacked it, and if they had, it is extremely probable that either Jamaica or Gibraltar would not now be in the possession of Britain. Their ignorance of that state, though scarcely credible, considering the frequent open communication by cartels, and the constant clandestine intercourse that was carried on between the British and French islands, is yet the only reason that has been assigned for the enemy never availing themselves of their frequent naval superiority, and of their great land force, to attack the most valuable English settlement in that quarter of the world. In the year 1781, the commissary for English prisoners at Cape François was taken by a privateer, and brought into Port Antonio, in Jamaica, which was the head-quarters of the 94th regiment, of which, at that time, I was surgeon. He was on parole; but, as the place did not afford lodgings fit for a gentleman, he was invited to live in the fort: one of the officers resigned to him his bed and his room, and while he remained with us, on every oc-



caſion he was treated with the moſt marked kindneſs and attention. For this he afterwards expreſſed his gratitude in the beſt manner, both in words and in deeds, declaring on his departure, that the politeneſs he had experienced ſhould not be forgot in the treatment of any Engliſh priſoners whom the fortune of war might throw into his hands at the Cape. He was a man of good ſenſe and diſcernment. He remarked the peculiar advantages of the harbour, nor did the condition of the fort at that particular time, nor the number and nature of the troops appointed to defend it, eſcape his obſervation. He was alſo a witneſs, as well as other priſoners, to the condition of our troops at Kingſton and Spaniſh town. He had been moſt cruelly treated by the captain of a Jamaica privateer, who made him a priſoner after he had been captured and ransomed by another. For this injury he received ample and generous remuneration from Sir John Dalling, and ſome merchants in Kingſton. His veſſel was reſtored, the ranſom given up, and the owners of one of the privateers made him a handſome pecuniary compenſation for the injury he had ſuſtained by the unwarrantable conduct of their captain. I hope, for the  
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the honour of human nature, that the gratitude of this man, who had ample opportunities of knowing the state of the island, prevented him even from wishing to injure an enemy whose honour, justice, and humanity he had so extensively experienced. But if, in consequence of the information of this person, or of any other prisoner, Jamaica had been attacked in the year 1780 or 1781, the enfeebled state of the greatest part of the British troops in that island, must too fatally have pointed out the importance of exerting every faculty to preserve the health and vigour of our army, and the danger of inattention to the manner of living of soldiers newly arrived in that country. The danger to which Jamaica was at that time exposed is now passed; but it is earnestly hoped, that in future the causes which contribute to diminish the health and strength of our armaments in the West Indies, may be more attended to, and consequently as much as possible avoided.

In the course of this work I shall have occasion to state the effects of spirituous liquors on the army, and the lower classes of people in Ireland. Those effects for many years past have arrested the attention, and wounded the feelings of every man of reflection or  
humanity.

humanity. I am authorized to mention that, in consequence of the representations of the clergy, and of the grand juries of several counties, of the pernicious consequences to the health and morals of the people, resulting from the excessive use of spirituous liquors, this subject will be among the first to engage the attention of the Irish Parliament at its next meeting\*; and, that an attempt will be made to diminish the consumption of spirits, and to increase, as much as possible, that of malt liquors. Should this work be honoured with the perusal of any member of the British Senate, I hope the facts it contains may excite his attention to the consideration of a subject which always must be of importance to Britain, while she wishes to maintain her possessions either in the Eastern or Western world.

\* This part was written many weeks before the Irish Parliament met. What has happened since, in the House of Commons of Ireland, sufficiently proves the accuracy of the information I received.

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SINCE the former part of this Preface was written, some gentlemen have been sent to the West Indies to examine the condition of our fortifications in that part of the world. It is to be hoped that it may have been a part of their instructions to examine also the state of the hospitals and barracks in the different islands, and to take the advice of some sensible medical man, with regard to the most proper situation for, and mode of constructing both hospitals and barracks. For, as far as I was able to judge, too little attention has been paid to these circumstances, and much mischief has arisen to the troops, which might easily have been prevented. Fortifications can be of little use, if the means are neglected of preserving the health and lives of those who are to defend them.

N<sup>o</sup> 49, Strand,  
12th March, 1791.



## INTRODUCTION.

**I**N every war, during the course of this century, in which the forces of Great Britain have been employed in the West Indies, it has unfortunately happened, that the number of those who have perished by disease has, in every instance, greatly exceeded the loss occasioned by the sword of the enemy. Various causes have contributed to produce this mortality; but to these causes no proper attention seems hitherto to have been paid, and consequently no effectual means have been employed to check their operation. We appear to have sought refuge in our indolence, and instead of attempting to lessen, we have been contented with deploring this mortality, as a misfortune not to be avoided. In the late situation of public affairs, when it was probable that a considerable part of the British army might be employed in the West Indies,

it appeared to me, that it was neither officious nor improper, to investigate the causes to which the mortality among troops in that country has been owing. But even now, when we have a prospect of peace, such an investigation may not be the less necessary. We may now have a better opportunity, than in the time of war, of determining how far the means recommended in the following pages may be useful in enabling soldiers either to avoid the most common, and, at the same time, the most active causes of disease, or of preventing the operation of those causes on the human body. In an inquiry of this kind it may perhaps appear, that we have been so long habituated to error, that the consequences of it are regarded nearly with indifference. Yet this error has been productive, equally of inefficacy in many military operations, and of much expence to the nation. If this observation is found to be just, it will not be consistent with the policy of a wise government to persevere in a practice which experience hath proved to be immediately injurious to individuals, and ultimately to the state; nor can the long establishment of such a practice be a good reason for its being continued.

## S E C T I O N I.

*On the Use of ardent Spirits, as a principal Cause of the Mortality among Soldiers in the West Indies.*

THE life of a foldier is, at all times, valuable to the state, as every foldier employed in the service occasions a small, though constant and growing, expence to the community. This life, on particular occasions, becomes still more valuable; when a foldier is sent to a distant country, either to defend a part of the empire, or to attack the dominions of an enemy, the expence of sending him (including pay, feeding, clothing, the hire of transports, and other contingencies) amounts, on a very moderate calculation, to upwards of thirty pounds sterling \*. The preservation, therefore, of any number of lives must be of important benefit to the state; for if five hundred men either die, or are so far weakened by disease as to be unfit for actual service, that number must be replaced, at a great expence to the nation, to enable us either

\* See note A.



effectually to defend our own possessions, or to annoy those of an enemy. But independent of the expence occasioned by the death of a soldier on foreign service, it ought to be considered that success in every military operation must, in a great measure, depend on the health and vigour of the troops employed to carry it into execution. The nation is therefore particularly interested in preserving the health of our troops, and may be enabled partly to obtain so desirable an end, as we have it in our power to remove one of the principal causes of disease to which they are exposed.

Dr. John Hunter, who was physician to the army in Jamaica during part of the late war, informs us, that in less than four years we lost 5250 men in that island only, not one of whom fell by the enemy. To a great part of this mortality I was a melancholy witness. Doctor Hunter's uniform attention to his duty, and the opportunity he had of acquiring information, prevent us from doubting the accuracy of his statement. Whatever were the causes of this dreadful mortality, among troops which were destined to protect one of the most important foreign possessions of Britain, it is certain that this, together with  
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the debilitated state of a great part of the army in Jamaica, during the years 1779, 1780, and 1781, rendered that valuable settlement in a great measure defenceless, and occasioned well grounded apprehensions for the safety of the island. If the great cause of that sickness and mortality is still allowed to operate, we cannot expect that its effect will be different; the climate and the causes of disease peculiar to it are still the same, and the constitutions of British soldiers are not better than they formerly were. We ought therefore to adopt some mode, which contains a probability of preventing the recurrence of a calamity which, in future, may occasion the loss of Jamaica to Britain. Any mode that is adopted can scarcely be worse than that which we follow at present, and which reason and experience condemn as destructive and absurd.

It is not my intention, nor is it in my power, to enumerate all the causes which contribute, directly or indirectly, to occasion the mortality above mentioned. Yet though I shall take notice of some, I mean here particularly to attend to two causes, which operated in no small degree, and were perhaps more active than any others, in ruining the health.

of our soldiers employed on service in the West Indies during the late war.

The pernicious effects produced on the human body by the habitual, and consequently immoderate, use of spirits, have been long lamented, equally by the physician and the moralist. Every medical man knows the difficulty in treating even a slight complaint arising in constitutions habituated to the use of spirits. Many sensible and deserving men, both of the medical and of other professions, have attempted, by exerting their influence, and by their writings, to prevent the destructive consequences proceeding from the too free use of this fascinating poison, among individuals in private life. But the effects produced, by the use of it, on soldiers and sailors (more important in their consequences, as affecting the offensive or defensive strength of the country) seem not to have been attended to in so particular a manner as the importance of the subject requires.

The impropriety of supplying our troops in the West Indies with rum only, excluding other liquors which are of real benefit to the person who uses them, is well known to every officer, and to every person who has been in the medical department of the army in that country.

country. To the testimony of those gentlemen, founded on their own observation, I appeal for the truth of the following remarks on the use of spirituous liquors.

The *habitual* use of rum, in the quantity allowed by government, leads, in most cases, to its being carried to excess; and, consequently, the daily use of a certain quantity of ardent spirits, of doubtful quality, renders the human body more liable to be acted upon by the causes of disease, in a climate to which that body has not been accustomed. We will prove hereafter, that, owing to particular circumstances in the state of a soldier doing duty in a West India island, rum, whether used habitually in *moderate* or *excessive quantity*, always diminishes the strength of the body, and therefore renders the men more susceptible of disease, and unfit for any service in which vigour and activity are required.

I do not assert that every individual soldier is thus weakened; but I assert, with some confidence, that the aggregate strength of a large body of troops is diminished by the habitual use of spirits; and that this diminution in the strength of a large body renders it unable effectually to execute a piece of service, to

which, otherwise, from its numbers, it might be competent.

It will not be denied that the climate is often blamed for that devastation which, with more justice, ought to be ascribed to our own ignorance and unaccountable inattention. The climate is certainly unfavourable to a British constitution, as it contains the causes of many diseases, so far peculiar to itself, that those diseases are either not known, or very rarely met with in Britain. Yet, by a little attention, the causes of disease have been prevented from operating on the bodies of Englishmen, many of whom have enjoyed (through a long course of years) in the West Indies, as good, and even better health, than they ever possessed in their native country. But if, by our preposterous conduct with regard to diet and other circumstances, instead of guarding ourselves against the unfavourable nature of the climate, we endeavour to bring our bodies into the fittest state to be acted upon by the causes of disease peculiar to it, the climate ought to be absolved from the heavy charge of the mortality which ensues. The following well known fact may lead us to believe, that the climate is not so very prejudicial to a European constitution, as it has been

been represented, and that men may, in the West Indies, generally enjoy good health, unless, by their own irregularity, they expose themselves to disease, for the effects of which irregularity the climate is very commonly made answerable. It is well known that many young men sail every year from Britain and Ireland, to seek employment in the mercantile line, or to act as book-keepers on a plantation in some of the West India islands. These men generally enjoy good health, as neither their circumstances, nor their hopes of preferment, allow them to indulge in any excess. But if, on any occasion, especially soon after their arrival, they happen to use spirituous liquors in immoderate quantity, and particularly if these are of a bad quality, the loss of life frequently atones for their imprudence. If then the consequences of the excessive use of spirits are often prejudicial to those young men, how much more frequently must they be injurious to a private soldier? The former and the latter were born in the same country, where the articles of their diet were nearly the same; yet on their arrival in the West Indies, the situation of the one is, in every respect, different from that of the other. The young adventurer is exhorted by  
advice,



advice, and compelled by authority, to abstain from the use of every thing that may be prejudicial to his health, which is consequently preserved, and his diet is little different from that to which he had been accustomed. But the usual diet of a soldier is immediately changed on his entering into an unfavourable climate, and he is invited to the use of spirituous liquors, which soon prove the means of his destruction, though given to him with the laudable, but mistaken, view of preserving his body in a state of health and vigour. Hence it will appear, that the difference in point of health, between persons in the mercantile and military line, is more owing to the difference in their mode of living, than to the influence of the climate, which seems to be exerted usually in a secondary manner, seldom injuring those who guard themselves against its operation, but very frequently acting as an exciting cause of disorders in men whose bodies, by inattention to their manner of living, are predisposed to disease. In confirmation of this remark, with regard to the different effects produced by the influence of the climate, unaided by any other cause, and those which proceed from the power of the climate co-operating with improper diet, I shall add the following

following fact, which, as an eye witness, I can vouch for.

In the late distressing and complicated war in which Britain was engaged, she was obliged, on a particular emergency, to raise a number of men, and to send them off, almost as soon as raised, to defend her possessions in the West Indies, or to draw the attention of Spain to the safety of her own settlements in that part of the world. In the year 1780, a scheme for this purpose was suggested, and four new-raised regiments\* were embarked for an expedition against the possessions of Spain in South America: three months elapsed between the day of their embarkation and that of their sailing from England; and after being six months at sea, on board of transports, they were landed in Jamaica, in the most unfavourable season of the year. As the men were in a very sickly and enfeebled state, the expedition to South America was laid aside, and they were ordered to remain in Jamaica, for the protection of that island. During these six months, the diet of the

\* 85th, 92d, 93d, and 94th, commanded by Lord Harrington, Col. M'Cormick, Col. Stewart, and Col. Dundas.

troops consisted in general of salted provisions, and, soon after sailing from England, the men belonging to a regiment of which, at that time, I was surgeon, were limited in the daily allowance of water, in four out of the five transports in which the regiment was embarked. In all the transports but one, the water was more or less ill-tasted, yet it was eagerly desired by the men, both on account of their living then entirely on salted provisions, and of the heat of the climate into which they had entered. The small-beer was either exhausted, or was become so sour as to be unfit for use; the men, therefore, had an allowance of rum and water, which was drank off immediately on its being delivered to them. The first circumstance that excited my attention to the subject of this treatise, arose from observing, that in one transport, where the men had an ample allowance of water and small-beer, during the voyage, they were much more healthy than those in the other ships.

From this total change in the manner of living, co-operating with the influence of the climate, it may be supposed that a very important change took place in the constitution of the soldiers. The body was weakened  
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from not receiving its usual supply of nutritive matter; and, being thus weakened, the powers on which life depends were kept in a state of exertion, greater in degree than they could bear for any length of time with impunity, by the constant action of the stimulus of spirituous liquors, whose ultimate effect was still farther to diminish the energy of the brain, and consequently to render the men more liable to disease. That this was the effect produced appears evidently from the mortality which ensued, for in some of those regiments, two-thirds, and in others upwards of one-half, died, or were rendered unfit for service, before they had been a year, or at most a year and a half, in the island of Jamaica. This fact can be well ascertained, and proves how pernicious the consequences are to young troops, resulting from a total change of diet, and especially from the use of spirituous liquors in an unfavourable climate. And from the observation, that the troops in one transport, which contained water and small beer in abundance, to whom no rum was served out till towards the end of the voyage, were more healthy than those in the other ships, it appears still more probable, considering too what has been said above on  
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the same subject, that the climate, unassisted by other causes, is neither so generally productive of disease, nor is to be considered as the *principal cause* of the mortality which happens among our forces in the West Indies. If it is argued, that the most temperate men, who take every precaution to preserve health, are often rapidly carried off (as is said) by the climate, I answer that, consistently with my own knowledge, men of a very opposite character, who have been equally exposed to the influence of the climate, have not only survived, but have enjoyed their health unimpaired. The same thing happens every day in Britain, yet we cannot assign any cause for it, until we are fully acquainted with every circumstance in those apparently opposite constitutions. Yet no man in his senses will conclude, because a temperate man who has lived well, and has been careful of his constitution, often speedily dies, from an attack of disease in the West Indies, and a person addicted to hard living survives with impunity, that the latter mode is most conducive to the preservation of health. At the same time I remember to have observed to a gentleman, who had resided many years in the island, and who, having been much in the society of officers, from  
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long experience confirmed the remark, that those officers, who drank a moderate quantity of good wine after dinner, were in general healthy and stout, while those who either abstained from it altogether, or who, instead of wine, drank largely of rum and water, suffered from various complaints, and frequently died.

There are two circumstances, attending the present mode of supplying soldiers with spirituous liquors, which may be stated here, as confirming the opinion given above, with regard to the effect of this mode. It was formerly said that the habitual, leads very generally, among soldiers, to the excessive, use of rum. This will not appear a surprising effect among a class of men whose conduct is under no restraint from public opinion, when we consider that the use of fruit preserved in brandy, or the use of various bitters infused in it, which has been prescribed as a remedy, has led many persons of both sexes, and of every rank in life, into an habit of drinking to excess. They, like many soldiers, soon feel a craving and uneasy sensation in the stomach, to alleviate which, they have recourse to the cause which originally produced it. To remove it, the soldier parts with the little mo-

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ney he can procure, for a portion of this ever-operating poison, a large quantity of which, of the most execrable quality, he obtains from an huckster, in the West Indies, for a very trifling sum. If he has not money, he sells his beef, pork \*, and even his necessaries (though almost certain of detection and consequent punishment) to procure a quantity of rum, from which, owing to the power of habit, he cannot abstain, though convinced by his own feelings that it is continually undermining his constitution. He perseveres in his destructive course in spite of remonstrance, in defiance of punishment; and, if attacked by disease, is either speedily destroyed, or is left an useless and expensive burden on his country.

The other circumstance deserving our attention, arises from a cause intended by government to produce a very different effect from what it does. Whatever may be said with regard to the superior wholesomeness of old to new rum, I am disposed to believe, from many instances that have fallen under my observation, that although there is some difference in the *immediate effect* produced by them

\* See note B.

on the body, the *ultimate effects*, resulting from the habitual use of *either*, are equally bad, although the effect of the old does not so speedily appear as that occasioned by the use of new spirit. However, as it has been long supposed, that the bad consequences, which we have ascribed to the use of ardent spirit, are in a great measure owing to the quality of the liquor, government, on this idea, has generally endeavoured to provide rum of the best kind. But the old rum, distributed by government, is disliked by the generality of soldiers, who prefer any vile adulterated trash, that leaves (what they call) a *grip* behind it \*. The daily allowance in Jamaica was half a pint to each man; but it is well known that this allowance was frequently encreased, by the connivance, or favour, of the person whose business it was to distribute it. As the government rum was often of a quality superior to that generally used in the island, the purchase of it became an object to many people of different ranks. Consequently a soldier was tempted to exchange his allowance for a double or a triple quantity of a liquor which he preferred to his own, and

\* See note C.

which, if we may judge of its qualities by its effects, was in the highest degree destructive; for in many cases these effects were almost instantaneously fatal. In others, though life was with difficulty preserved, yet the preservation of life was attended with a fatuity of mind, and a loss of bodily strength, which rendered the men incapable of any military duty. Many lingered in this situation for a longer or shorter time; some had a partial recovery, but it is believed that no man, who at any time suffered materially from this cause, was ever restored to a state of health which could render him useful as a soldier. It will not be concluded from hence, that in order to put a stop to a traffic of this kind, so injurious to the men, they ought to be supplied with new instead of old rum. But the fact above mentioned may partly explain the manner in which the habitual use of rum has a tendency to occasion its being carried to excess.

That the use of old is not so immediately pernicious as that of new rum, will probably be admitted as a matter of general experience. The swallowing of even what may be considered a moderate quantity of new rum, has, (as I have observed) been followed by almost sudden



sudden death. Numerous instances can be produced of the same effect happening among the lower classes of people in Ireland, from the use of *Whisky*, which, in its mode of operating on the body, much resembles that of new rum; and especially in the use of either producing, very speedily, violent flushing of the face, throbbing of the carotid and temporal arteries, with other symptoms of an increased quantity of blood being sent to the brain. If the quantity either of whisky or of new rum is farther increased, a furious intoxication, resembling raging madness, ensues, which often ends in death, or leaves the unhappy object incapable, for a long time, of any mental or bodily exertion.

The causes to which the difference, in immediate effect, produced by old and new rum is to be ascribed, are not accurately ascertained. Yet though I admit the fact, as confirmed by repeated observation, I am neither prepared, nor do I think it of consequence to enter minutely into the consideration of those causes. It is sufficient to observe at present, that the difference in immediate effect has been ascribed to new rum containing a portion of lead in solution, which is known to be a deleterious poison. This supposition, however,

as far as I can judge, appears to be not well founded. Several experiments have been made, which have failed, to ascertain the presence of lead in new rum. Yet this supposition seems to derive some weight from an observation made by the late Dr. Fothergill, who remarks, that persons accustomed to dram-drinking, especially women, (among other complaints to which they are subject from this cause) have often the sensation of a burning heat in the soles of their feet; a symptom which generally attends the disorders proceeding from the admission of lead and some other mineral poisons into the body. But if the bad effects of new rum are owing to its containing a quantity of lead in solution, which is precipitated from the old, this symptom ought never to appear in persons who use spirituous liquors only of the best quality. But I know, from much attention to this subject, that a dryness and a burning sensation in the palms of the hands, and in the soles of the feet, even though the person is otherwise free from complaint, are symptoms often attending on the excessive or habitual use of spirits, although there is no reason to suspect that the spirit contains any pernicious impregnation. Those symptoms  
are



are frequently attended with a varicose state of some of the veins in the lower extremities, accompanied with excruciating pain, and with ulcers in these parts, which are found to be uncommonly obstinate, and are seldom or never cured, while the person is in the habit of using spirits. Perhaps it is owing to the general and immoderate use of whisky, that ulcers, of different kinds, in the inferior extremities, are more frequently met with among soldiers, and the lower classes of people in Ireland, than among persons of the same description in any other part of the British dominions\*.

It has been also supposed, that new rum contains a larger quantity of alcohol, in a more concentrated state, and of empyreumatic oil, than the old. This supposition also is liable to many objections, and indeed any opinion on this subject, not supported by actual experiment, scarcely deserves attention. But it will often be found difficult to ascertain by experiment the cause to which the difference in effect, between old and new rum, is to be ascribed, as it is a practice among many dealers in spirits, *to make old rum from*

\* Note E.

*spirit newly imported.* This is done by impregnating the new spirit with matters which impart to it colour and flavour, in some measure resembling those of the old. Hyson tea, burnt sugar, and bruised prunes, are often used for this purpose; but it is reasonably doubted, whether the impregnating matter is always of so innocent a nature. New rum, thus manufactured, is sold by some people as old spirit. I leave to others to determine the probability of this manufacture being frequently introduced into the navy and army, during war, when the consumption and consequent demand are greater than at other times.

It was stated above, that the ultimate effects produced, on the bodies of soldiers, by the habitual use of spirits, of whatever quality, are the same. Some doubt of the truth of this observation may arise, from the many examples which can be brought of persons who have been in the habitual use of rum, during a long period of life, without experiencing its bad effects. But such instances, though common, are far from being universal, even in private life, and in the army are extremely rare. But even in private life, a person who uses a certain daily quantity of  
ardent

ardent spirits, feels the effect of them more generally than is imagined, in various occasional yet transient complaints, although the cause of these effects is either not known, or, if known, is not assigned. In the course of the last three years, I have met with many cases in this climate, in which the immoderate, and even the habitual use of a certain quantity of spirituous liquors daily, hath occasioned such a degree of fatuity, as rendered the person altogether incapable of attention to business. I can produce many instances of sudden death occasioned by the use of a large quantity of spirituous liquors; and every man of observation, engaged in the practice of physic, may recollect instances of insanity proceeding from the same cause. But if a man has been accustomed, during many years, to swallow daily a quantity of ardent spirits with impunity, his good fortune must be owing to his having an uncommonly good constitution, to his enjoying a nourishing, consequently an invigorating diet, and to other circumstances in his mode of living, which do not occur in the life of a private soldier employed on service, in an unfavourable climate, and supported by a diet which affords little nourishment, and to which, until he

entered into that climate, he had not been accustomed. Any objection, therefore, drawn from such instances, does not apply to the general argument, that the habitual use of rum is prejudicial to the constitution of an English soldier in a West India climate.

Any ardent spirit is more or less injurious to the body, according to the manner in which it is used.

The practice of simple dilution with water (the mode in which rum is administered to the army) ought to be reprobated and abolished, as productive of all the bad consequences resulting from rum, or any other ardent spirit, used in what is called its raw state. Rum, diluted with water, is extremely unpalatable to a person unaccustomed to it; but, after some time, it frequently happens that this mode of using ardent spirits is preferred to any other in which they are employed. An observation made by the late Dr. Cullen, of the truth of which every man can judge, seems to explain the cause of this fact. “ They are the  
“ strong and even disagreeable impressions, re-  
“ peated, that give the most durable and te-  
“ nacious habits, and therefore the chewing  
“ of tobacco is apt to become one of these;  
“ and it is in this way that tobacco is ready  
“ to

“ to be carried to the greatest excess.” It is on the same principle that the use of rum diluted with water, or what is vulgarly called *grog*, although at first disagreeable, yet by frequent repetition often induces an habit of drinking very difficult to overcome, even among men in a superior line of life, but which is never relinquished by a private soldier, while he has the means of gratifying his desire for it.

In this mode of using it, rum is perhaps more injurious to the body than in any other, because it makes only a simple uncompounded impression, which becomes weaker by a frequent repetition of its cause: and therefore, after some time, an increase in the quantity of spirit becomes necessary to occasion the same impression which a much smaller quantity of the same spirit produced, before the body had been accustomed to it.

When rum is blended with a large portion of sugar, water, and vegetable acid, it is found from general experience to be less pernicious than in the form above mentioned. Several satisfactory reasons, unnecessary to be stated here, may be assigned for this. We need only remark, that the vitriolic acid, which cannot be used with safety, except in moderate quantity when simply diluted with water, may be employed

employed to a great extent, without injury, when mixed with mucilage of gum arabic. It is perhaps owing to the same reasons, that mixing ardent spirits with milk deprives them in a great measure of their noxious power. In this form I have exhibited them in many cases, with great temporary benefit, and often with permanent advantage. This has happened chiefly in cases where it was necessary to support the strength of the system, not by the use of tonic, or what are called strengthening medicines (which, from inattention to the circumstances of the case, are often an useless, and therefore an improper remedy) but by throwing in a quantity of nutritive matter, (milk or animal jelly) which would have been rejected by the stomach, unless accompanied by a moderate stimulus, to excite that organ to a due performance of its peculiar functions. Rum is often used by soldiers undiluted, and very generally it is diluted with only a small quantity of water, a mode which, for the reason above assigned, is more injurious to the body than any other in which it can be used. It is always indeed less injurious according to the quantity and nature of the ingredients with which it is mixed, especially if these are of such a kind as to diminish



minish its stimulus, and, at the same time, to afford some nourishment to the body, when in a debilitated state. This leads us to remark, that the use of spirituous liquors is always more prejudicial in the West Indies, than in Britain, from the different state of the body in these countries. Without troubling ourselves to state the causes, we may safely assume it as a fact, that the body of an English soldier, even in health, in the West Indies, is not so vigorous, nor capable of such exertions as in England. But it is, or should be, an axiom in medicine, that the strength of a stimulus ought to be in proportion to that of the body to which it is applied, and, consequently, that it never can be justifiable to apply a very strong stimulus to a body much weakened. An inattention to this simple principle, which ought to be a leading one in medicine, as it is supported on the observation of what every day happens, hath occasioned much mischief in the practice of physic. It may be owing in a great measure to this inattention, that, notwithstanding the improved mode of treating fevers, they are not less generally fatal than formerly; and, although we have a medicine which will certainly cure every symptom of the lues venerea, yet any  
diminution



diminution of the evils occasioned by the original disease, is almost over-balanced by the mischief resulting from the injudicious use of the remedy; which often induces a particular state of body, and symptoms connected with that state, equally destructive with the primary complaint, and generally much more difficult to remove. Wine and bark, judiciously administered, are very valuable remedies in the treatment of fever, and mercury is equally useful in the venereal disease; but I am strongly induced to believe, that these remedies could not so often fail in removing the disorders for which they are prescribed, if more attention were paid to the principle above mentioned. I have known practitioners who supposed that wine and bark could seldom be of service in any case of fever, from having observed that these medicines had frequently failed in producing any beneficial effect; and I have no doubt that the failure, in the greatest number of those cases, was owing to a want of attention to the circumstances which indicated or contra-indicated their use. But even when indicated, attention should be paid to the quantity of the dose, which, especially in the latter stage of fever, is often too great for the strength of the patient,  
and

and encreases the confusion in the system, as well by its quantity as by its quality. Whether wine acts as a direct or an indirect stimulus, we know that it excites the powers of life to an encreased action, in proportion to the quantity in which it is given, to the strength of the patient, and, as he has been formerly accustomed to the use of it. But if a large quantity is given to a soldier who has not been accustomed to it, at a time when he is in a state of extreme debility, the vital power must be stimulated to an exertion greater than it is capable of performing with safety, weakened as it is by the existing disease. But if this encreased exertion of the vital power, occasioned by the wine, is mistaken, as it often is, for an encrease of the symptoms depending on the original disease, which we propose to cure by the use of wine, the consequence is, that the remedy is exhibited both more frequently, and in larger quantity, until the vital power, wearied out by the constant operation of a powerful stimulus, becomes incapable of exerting its energy, and the patient is often hurried out of the world in the stupor of intoxication. Every man of candour in the profession will own, that this frequently happens; and that

to suppose wine to be an effectual remedy, in the cure of low nervous or putrid fever, in proportion as it is given in large quantity, is a most mistaken idea, and has been productive of very serious consequences. From a good deal of attention to this subject, I venture to assert, that there is no remedy in the materia medica prescribed so frequently as wine, with so little attention to the circumstances which ought to direct or forbid its use, or to regulate the quantity in which it is employed; and that many advantages, which may be derived from wine as a remedy, are prevented by the indiscriminate mode of prescribing it, regardless of the present state or former habits of the patient; and, consequently, in the hands of negligent practitioners, it must often do mischief. The same inattention often deprives us of the benefit we may derive from the use of bark in the cure of fever. I have frequently seen an ounce and a half of this remedy taken in the day, with manifest advantage; but that was only in the first stage of synochus, where the inflammatory symptoms either did not run high, or had been mitigated by other remedies; or in the beginning of the second stage, where the strength was not yet very much impaired.

But I never observed any beneficial effect to be obtained from throwing in a large quantity of bark in substance towards the latter end of the second stage, when the strength is much reduced. On the contrary, in these circumstances of the patient, a full dose of bark, or of wine, often excites nausea and vomiting, attended with such an irritable state of the stomach that, ever after, food or medicines can scarcely be retained.

These observations may, at first sight, appear not to be connected with the subject of this treatise, in which we proposed to consider only the causes, and not the treatment of diseases; but they have been stated as tending to confirm the principle above laid down, that a strong stimulus is injurious to a body in which the energy of the vital power is weakened by disease, or other causes. Therefore, as a soldier, even in health, owing to the peculiarity of his diet, and the influence of the climate, is in a state of less vigour in the West Indies, than in England, it will appear that the effects resulting from the constant operation of so powerful a stimulus as ardent spirits afford, must be more pernicious in the former country, than in the latter.

Notwith-

Notwithstanding what has been said, it may be improper totally to exclude the use of spirituous liquors among soldiers on service in the West Indies. Circumstances may occur, in which, to a certain extent, they may be administered with great advantage. In cases of night duty, when the body, from the relaxing heat of the preceding day, is extremely susceptible of cold, and when, at the same time, a soldier is exposed to rain, or to have his feet and legs wetted, the use of ardent spirits, by diffusing a sudden stimulus through the system, imparts to it a temporary vigour, which enables it for a time to resist the effects of cold and moisture. In cases of fainting, from excessive fatigue, or too long fasting, a quantity of ardent spirits, mixed with sugar and water, may be highly useful, until remedies of more permanent efficacy can be procured. The judgment of the commanding officer or surgeon of a regiment can determine the propriety of using spirituous liquors, in various other situations in which their men may be placed. I shall only remark here, that spirituous liquors ought never to be repeated, after the cause which rendered them necessary is removed, if we wish to guard



against the consequences resulting from their habitual use.

It is not against the occasional use of rum, in uncommon circumstances, that any objections are raised. We object only *to the constant daily use* of a certain quantity of ardent spirit, as *inviting* even the best disposed men to employ it to excess; and as creating a want which few men have sufficient resolution to avoid gratifying, even although conscious that the gratification is ruining their health. Consequently, we farther object to it as having an evident tendency to injure the bodies of those men, on whose exertions our success in every military operation must, in a great measure, depend: and, because the *habitual use renders the employment of ardent spirits of no avail in certain unusual situations, when otherwise they might be recommended with propriety, and used with success, to excite, for a time, the vigour of the system, and to prevent its being operated upon by the causes of disease.* These objections, which are founded in reason and fact, justify us in considering the habitual use of rum, of whatever quality, together with the usual diet of a soldier, as the principal and most active cause of the mortality, which happened among our troops in the West Indies,

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during



during the late war. If any farther proof of the truth of this opinion be necessary, let me remark, that the same mortality did not happen (at least in the regiment to which I belonged) among men who were in the same situation with others, natives of the same country, doing the same duty, and equally exposed to the influence of the climate, but who had a more nutritive diet, had regular and comfortable meals, and only used rum occasionally, and then in moderate quantity.

When we ascribed the more pernicious effects of spirituous liquors on the body, in the West Indies, to the diminished vigour of the system, it ought farther to have been remarked, that rum contains no nutritive matter whatever. Its first effect is a temporary increase of vigour, which is necessarily soon followed by languor and weakness, greater in degree than the preceding excitement; and to remove this languor recourse is again had to the cause which produced it, with what consequences need not be more fully stated. Rum also possesses no quality, by which it can counteract the effects produced by a long-continued diet of salted provisions; on the contrary, it encreases those effects; for although it primarily stimulates the stomach, yet ultimately,

mately, by its habitual use, it occasions such a degree of weakness in that organ, as prevents it from completely performing the process of digestion, consequently the strength of the body is still farther diminished, as the requisite supply of nourishment is not procured from the food taken in.

Having said so much on the subject of spirituous liquors, it may not be improper to bring the principal observations we have made under one point of view, to enable us more readily to determine how far, from the effects produced by spirits, their constant use may be considered as the principal predisposing cause of disease among soldiers in a West India climate.

1st. Experience and observation have proved, that when the body is weakened by fatigue from excessive exercise, night watching, intense study, depressing passions, by *improper food*, too long fasting, or *excess in drinking*, it is more liable to be acted upon by the causes of disease than at other times.

2dly. The body of a private soldier, on account of his diet being less nutritive, and the relaxing influence of the climate, is less vigorous in the West Indies than in Britain.

3dly. The constant operation of a strong stimulus on a weakened body, increases the weakness of that body. Rum is a strong stimulus, therefore the habitual use of it, in the West Indies, where the system is less vigorous than usual, is improper.

4thly. All strong stimuli, after some time, require an encrease in the strength to produce their wonted impression; therefore the habitual use of spirits necessarily leads to their being carried to excess.

5thly. The destructive effects of spirituous liquors are more owing to the habit of drinking to excess, which the daily use generally occasions, than to any difference in the quality of the liquor, as the ultimate consequences arising from the habitual use of old or new rum are nearly, though not so speedily, the same.

6thly. Spirituous liquors may often be employed with advantage; but the habitual, in a great measure, deprives us of the benefit we might obtain from the occasional use of them.

7thly. The climate of Jamaica is not of so destructive a nature as has been represented. The most irregular men suffer most.—The fatal consequences of irregularity are often

unjustly ascribed to the unfavourable nature of the climate; but the habitual use of spirits has a tendency to lead the best disposed soldiers into the commission of every irregularity, and therefore may justly be considered as the principal predisposing cause of disease among our troops in the West Indies.

It has always been admitted, that a knowledge of the causes is essential to the cure, and to the prevention of disease. If then it is allowed, as I hope I have sufficiently proved, that the use of spirits is the great predisposing cause of those diseases which have been so fatal to our troops in the West Indies, a great point is gained to enable us, by regulating the mode of supplying the men with spirituous liquors, to prevent the recurrence of so dreadful and expensive a calamity as we sustained, not only in the late, but in every preceding war, by the mortality in the army on the West India service. The British forces employed in Germany, during the war before last, exceeded ten times in number those who served in Jamaica; and yet, during four years and an half, the army on the continent lost only 6500 \* men by disease, while in four

\* See Dr. Millar on the Practice of the Westminster Dispensary.

years of the late war we lost in Jamaica alone 5250, by the same cause. In Germany, during each campaign, the men were continually harrassing and harrassed, were fatigued by forced marches, they often slept on the ground, exposed to the influence of marsh effluvia and night air, and to epidemic and infectious diseases of different kinds. In Jamaica, the men (in general) were lodged in comfortable quarters, were seldom exposed to marsh effluvia, were not affected with any contagious diseases, (which are more rare in that country than is generally supposed) nor did the performance of their duty, except on a field day, or when on guard, either expose them to fatigue, or oblige them to run any risk from the chilling influence of the land-wind. And yet, notwithstanding this difference in the situation of the two armies, and in their numbers, the few regiments in Jamaica lost nearly as many men by disease as the army in Germany. To what cause is this similarity in point of loss to be ascribed, except to the destructive effects of the immoderate use of spirits, in a country where they are so easily procured, and where indolence, inactivity, and consequent languor and dejection of mind, favour their operation in injuring the health?

I shall



I shall now proceed to notice another cause of disease, which, though not so generally active as that we have been considering, still merits no small share of our attention.



## SECTION II.

*On the Use of Salted Provisions, and on the  
Mode of preserving them.*

**I**T has been long remarked, that common sea salt is a very indifferent preservative of meat, and the truth of the observation has been confirmed, both by the experiments of several eminent chymists, and by the experience of our most celebrated navigators. Sir John Pringle observed, many years ago, that, even in the largest quantity, common salt is not the best preservative, and, that in a small quantity it strongly promotes putrefaction: for meat of every kind, cured by the common sea salt, soon becomes putrid, although the salt for a time prevents it from being unpalatable. The late experiments of the ingenious and indefatigable Earl of Dundonald have thrown farther light on this subject, and have added weight to the remarks of Sir John Pringle. His lordship has observed,  
that,

that, on account of the mixture of ingredients which sea salt contains, it must be, in a great degree, unfit for preserving animal food. Those ingredients appear, by experiment, to be nauseous bitter and cathartic salts, having an earthy basis, (magnesia salita, magnesia vitriolata or Epsom salt,) which are intimately mixed with the common sea salt. He has therefore instituted a process, by which sea salt may easily be rendered infinitely more pure, and consequently more fit for preserving meat, than the salt in common use. The process is very simple, and may be executed without much trouble; it is founded on an idea, which experiment has confirmed, that water, saturated with sea salt, will still dissolve a large portion of the ingredients that are mixed with it, while the common salt is left in a purer state after every ablution. [For a full account of this process see the Transactions of the Royal Society of Edinburgh, and Observations on Salt by the Earl of Dundonald.]

It is certainly incumbent on those, whose office it is to supply our forces with provisions, to pay the strictest attention to the means by which meat may be most effectually preserved. Inattention to this subject often occasions both mischief and expence. On many occasions, during

during the late war, it happened that very large quantities of provisions were condemned as unfit for use, the expence of which might have been saved to the nation\*, if more attention had been paid to their original quality, and to the mode of preserving them. Government ought therefore to have it ascertained by experiment, what is the most efficacious mode of preserving meat from putrefaction, and should oblige Contractors for supplying beef or pork, for the navy and army, to cure the meat in the manner which experiment may prove to be the best. It is not enough that a Contractor supplies the quantity wanted, pains should also be taken to know the quality of the meat, and that can be discovered only from a knowledge of the means by which it has been preserved. For meat, when delivered into the king's stores as being newly cured, may appear to be perfectly sound and unexceptionable, but may be in a state diametrically opposite, before it arrives at any of our settlements abroad; this is a circumstance which happens very frequently. But, independant of the expence arising from the loss of provisions which are

\* See note F.

unfit for use, from having been either originally of a bad quality, or having been improperly cured, the case is still worse, if, for want of other provisions, the men are compelled to live upon those which are damaged. In general, all kinds of provisions, in the manner in which they are preserved for the troops abroad, are considerably 'putrid, even when they arrive at the place to which they are consigned; but they soon become still more so; and, though more offensive to the smell than to the taste, are, in a warm climate, particularly unwholesome, and are often the unsuspected cause of various diseases. A circumstance occurred at Port Antonio, which led me to pay more attention to the state of the men's provisions, than before had appeared necessary. Soon after receiving a cargo of provisions from Kingston, several of our healthiest and best men became languid and weakly, with so evident an alteration in their looks for the worse, that no person failed to observe it. After some time we had several cases of dysentery; and a violent diarrhœa, approaching to lientery (that kind of flux in which the food passes through the body nearly unchanged) became very general among the private soldiers, and even some of the officers

were

were affected with it. The complaint being general, obstinate, and in too many cases proving fatal, our attention was necessarily awakened to discover the cause of so sudden an alteration in the health of the men, which before had been as good as could be expected in their circumstances. As no complaint was made of the provisions, the water was suspected; but, although the well was changed, the frequency of the disorder did not abate. It was observed that few of the married men were affected, and this first led to a suspicion and afterwards to a discovery of the cause of this dangerous and very troublesome complaint. The married men seldom used the government provisions, which were exchanged by their wives for various other articles of diet, and consequently they always had more comfortable and nourishing meals than their poor companions. This also accounted for a remark, which had often been made, when we were at a loss for nurses, that it was very remarkable we had no married men in the hospital, whose wives might have afforded some assistance in that capacity. On examining the provisions, the beef and pork had a peculiarly offensive smell, which was increased on their being boiled. When boiled, the  
fibres



fibres of the beef had lost their adhesion to one another, and the meat resembled a piece of untwisted rope-yarn. The pork was in as bad a state; the flour was musty and maggoty, and the whole cargo came under the literal description of damaged provisions. It was evident that the diseases we have mentioned were owing to bad diet, as when that was changed the complaint became less frequent, and in a short time was not more common than those complaints are in the West Indies. Even the officers, who used those provisions very sparingly, were affected with diarrhœa, although it is customary to reserve for them the prime pieces (as they are called) of the meat. A most unjust and injudicious preference, as the officers, from having wine and other articles, can bear bad salted provisions with less injury than is sustained by the private soldier from the same cause.

I have been so minute in this account for the purpose of exciting commanding officers and surgeons of regiments abroad, frequently to examine the state of the soldier's provisions, the bad quality of which often occasions more vexation to the one, more perplexity and trouble to the other, and greater  
loss



loss to the state than we have been aware of. For I am fully convinced, not merely from my own experience, but from the accumulated observation of many sensible and discerning men, both in the military and medical profession, that if the requisite attention were paid to this subject, an attention proportionate to its great national importance, we should not lose one third of the number of those who in every war fall victims to disease.

The effects occasioned by the long-continued use of salted provisions are universally known. But, as the use of them among troops on foreign service is unavoidable, we should endeavour to render their effects as little injurious as possible. Various means have been recommended for preserving the health of mariners, suggested by good sense, and so far confirmed by experience that, to use the sentiment of a justly-esteemed physician and philosopher\*, there is now as little danger to health in traversing the globe, as in a journey on the continent of Europe. Yet, while the treatment of diseases incident to sailors has engaged the attention of many eminent physicians, whose writings have added greatly to our stock of practical knowledge, the means of *preserving*

\* The late Sir John Pringle.

the health of the military have been comparatively overlooked.

To render salted provisions less injurious to the body, it is necessary to attend both to the manner in which they are cured, and to that in which they are used. From the result of Lord Dundonald's experiments, it will appear evident, that meat preserved by unpurified sea salt must have a strong tendency to run into a state of putrefaction; for admitting it as a fact (what has never been proved by experiment, but has only been supposed) that salt, even in its purest state, and in large quantity, is a good preservative, yet it is well known that in small quantity it promotes the putridity, and consequent solution of animal substances. But experiment has now ascertained, that in any given parcel of English-made salt, used for domestic purposes, the quantity of real sea salt is less by a tenth part than the bulk of the parcel. And, as the nature of the salts which are mixed with sea salt is ascertained, it is not extravagant to suppose, that their effect in injuring is not inferior to that of sea salt in preserving meat; or, that the power of sea salt in preserving meat, is so far counteracted by those ingredients with which it is mixed, that it is obliged to contend not  
only

only with the natural tendency of all animal substances to putrefaction, but also with the putrescent operation of those salts which are mixed with it in its unpurified state. From what has been advanced, it will not appear surprising, that many diseases among soldiers and sailors, should be owing to their provisions having been cured in an improper manner. And, as Lord Dundonald's process for purifying sea salt can be executed for less than three halfpence *per* bushel, (56 pounds) his Lordship's suggestion is proper and humane, that the legislature ought to interfere, and, by an act of parliament, enforce the purification through all the salt-works in Britain, and compel the curers of provisions, for the navy and army, to use no other salt than such as has been freed from its impurities. In such a proceeding government would soon find its interest, both as the health of our forces might thereby be better **preserved**, and, in time of war, the great expence might be avoided which arises from the loss of damaged provisions. The advantages that may result from it to the trade of the kingdom, are fully stated in the noble Lord's pamphlet above quoted.

I am

I am indebted for the following remarks on the subject of provisions to Captain Thomas Forrest, a gentleman well known to the public as a navigator, and who, in that capacity, had ample opportunities of exercising a spirit for observation on the different effects produced by a difference of diet.

“ The following remarks,” says he, “ were  
“ first suggested from observing the uncom-  
“ comfortable manner in which seamen, on board  
“ of ships of war, often live in the East Indies,  
“ (where I resided many years, and made  
“ above twenty country voyages) compared  
“ with the much more comfortable situation  
“ in which they might be placed at the same  
“ expence. I chiefly condemn the improper  
“ mode of preserving beef and pork, not only  
“ in the East Indies but in Europe. This  
“ mode of preserving meat admits of its being  
“ dressed *only in one manner*, by boiling. The  
“ Europeans had the usual navy allowance of  
“ beef and pork, but there was a sameness in  
“ this kind of diet, and especially in the mode  
“ of dressing it, which disgusted them, and,  
“ as they had little exercise, I am persuaded  
“ salted meat was improper and unhealthy  
“ food in a hot climate, especially for those  
“ who were sickly. The Lascars live in a  
E “ very

“ very different manner. In what are called  
“ the country ships in the East Indies, the  
“ European sailors are in the proportion of  
“ one to five Lascars, and go under the name  
“ of quarter-masters. I always remarked  
“ those Europeans take notice, in a discon-  
“ tented manner, that the Lascars lived better  
“ than they did; *yet the expence of victualling*  
“ *the Lascars did not amount to half the sum*  
“ *that was laid out in victualling a much smaller*  
“ *number of Europeans, who lived on salted*  
“ *meats sent from Europe.* Latterly I altered  
“ my mode of victualling the Europeans.  
“ The beef and pork, which I carried with  
“ me to sea, were preserved in a different  
“ manner, and admitted of some variety in  
“ the mode of dressing. The meat was cut  
“ from the bone in slices, and preserved with  
“ a mixture of salt and raw sugar. Prepared  
“ in this manner, it kept much better, and  
“ occupied less room. I would therefore ad-  
“ vise, that the provisions for the navy should  
“ be preserved with equal quantities of the  
“ best salt and raw sugar, and that the bone  
“ should be entirely left out; for it is often  
“ observed, even in meat salted for domestic  
“ use, that the part next the bone is the first  
“ that is spoiled. This may probably be  
“ owing



“ owing to the salt never penetrating the  
“ bone, which consequently soon becomes  
“ more or less decayed, and admits the oozing  
“ out of a putrid oily matter from its cells,  
“ which corrupts the surrounding meat.  
“ Hogs should be skinned, and preserved in  
“ the same manner. I allowed my men a  
“ pint of tea twice in the day, which, includ-  
“ ing sugar, (and the tea was sufficiently  
“ strong) did not amount to a greater daily  
“ expence than a penny for each man. Sugar  
“ is very cheap in Bengal. For sixteen men  
“ I allowed two ounces of tea, value four  
“ pence, and four ounces of sugar, value  
“ two pence, which made sixteen pints of  
“ tea, at an expence not deserving attention,  
“ when compared with the beneficial con-  
“ sequences arising from it; for I always ob-  
“ served, that *when sailors became fond of tea,*  
“ *they were weaned from drinking strong liquors.*  
“ I therefore encouraged tea-drinking as  
“ much as possible, but without assigning any  
“ reason for so doing. The use of coffee,  
“ cocoa, or chocolate answers the same pur-  
“ pose.

“ A sailor on board a man of war has on  
“ meat days a piece of salt beef or pork boiled



“ for dinner ; at that meal it is often eat up ;  
“ but if any remains, it is reserved for next  
“ day’s breakfast, when the cold uncomfortable  
“ scrap, having no power to tempt an appetite,  
“ cloyed with a sameness of diet, and seldom  
“ encreased by much exercise, is thrown aside  
“ with disgust. Breakfast, in warm countries,  
“ ought to be a very comfortable meal, and  
“ if a person eats a hearty breakfast, in general  
“ it is a pretty good criterion of the state of  
“ his health. During the many years I sail-  
“ ed in India, I never permitted any person  
“ to go on shore without breakfast, if there  
“ was a probability of their being absent from  
“ the ship after eight o’clock ; and the cooks  
“ were often up by break of day to dress a  
“ hot breakfast for those who went on shore  
“ early in the morning, and were to be de-  
“ tained there for several hours in the discharge  
“ of their duty. If men were exposed to the  
“ sun for any considerable time, without  
“ breakfast, illness was often the consequence ;  
“ but otherwise they could bear being in  
“ the sun a whole day without complaint.”

Captain Forrest has favoured me with several other remarks, which, as they relate chiefly to the mode of victualling country ships

ships in the East Indies, do not particularly apply to the subject of this inquiry \*.

It may here be remarked, that the observation of Captain Forrest, with regard to the power of tea or coffee in weaning men from the use of spirits, has been confirmed by many examples both in the army and in private life, and it may partly account for the remark formerly made, that in the regiment to which I belonged, the married soldiers, who had industrious wives, were uncommonly healthy when compared with the others. His observation is no less just with regard to the impropriety of ordering men upon duty, in a warm climate, early in the morning, before their bodies are in some measure recovered, by a supply of nourishment, from the relaxed and debilitated condition in which they are after the state of sleep, in the contaminated air of a barrack-room, or the hold of a ship. The 92d and 94th regiments seldom went out to exercise in the morning, at Spanish Town, without increasing the sick list on their return from the field. As regularly as a field day took place in the 94th regiment, (before the men had been by degrees accustomed to the cli-

\* See note G.

mate, or had recovered from the effects of six months confinement on board of transports, where they had indifferent provisions and bad water) we had always a number of men sent to the hospital as soon as the regiment was dismissed on parade. The sick complained of distressing nausea, with severe bilious vomiting, and excruciating head-ach. These symptoms were in general speedily removed, although in many cases they ushered in diseases which had a fatal termination. From hence an observation arises, the truth of which is too obvious to require being insisted on, or to be illustrated by farther examples, that the mode adopted in the late war, of sending young regiments to the West Indies, before they were fully disciplined, or had acquired the habits of soldiers, was extremely impolitic, as being attended with an heavy and useless expenditure of the public money, and as the men appear to have been unfit for any active military operation in that country, since they suffered so severely from the slight fatigue of the drill.

From what has been advanced in this and the former section, with regard to the use of spirituous liquors, and the general state of salted provisions, the propriety of paying more at-  
tention

tention to the mode of victualling our forces in the West Indies will probably appear so evident, as to render it unnecessary that any thing farther should be advanced on this subject. The mischief occasioned by the habitual use of spirits among private soldiers, has been stated from facts, and not from a desire to ascribe effects to causes incapable of producing them. Those facts do not rely solely on my observation, but have been confirmed by the testimony of every military man with whom I have conversed on the subject. We have also briefly pointed out the disadvantages arising to individuals, and to the state, from the present mode of supplying the forces of this country with salted provisions; and we have stated the impolicy of government, in being contented simply with the quantity agreed for, without examining the quality of the meat; and I here repeat, that no accurate judgment can be formed of the permanent or perishable nature of provisions, as delivered at the king's stores, unless the mode in which they have been cured is fully known; and it should be declared upon oath, that this mode has been according to that which accurate experiment shall determine to be the best. The greater part of the salted provisions for

the navy and army in the West Indies, are sent from Ireland; and surely it can be no great hardship on that country, while she enjoys so large a share of the provision trade, owing to the great advantages she possesses over Britain in the manufacture of salt, to take care that the provisions, supplied for those who form the acting strength of the empire, should be cured in a proper manner, by salt of a sound quality, freed from its impurities. The Irish merchants, employed in that trade, have more liberality than to allow a trifling expence in the purification of salt to come in competition with the health of their fellow citizens, and the general benefit of the empire. Yet, as it is impossible to suppose that every individual, among any class of men, will neglect his own interest for the sake of remote advantages to others, an act should also be passed by the parliament of that country, enforcing the same mode of preserving provisions that may be adopted in Britain. And surely no objection will be urged, against such a law, by the liberal man, who, disdaining the sordid selfishness of the venal and the mean, adopts the sentiment of the true patriot, *Salus populi suprema lex*.

## SECTION



## SECTION III.

*On the Means of preserving the Health of the Army in the West Indies, and of preventing the pernicious Effects resulting from a Diet consisting of Salted Animal Food and Spirituous Liquors; with Remarks on the Use of Malt Liquors.*

AS a change of diet is unavoidable, and as salted provisions must always form a large share of the diet of an army on foreign service, it is worthy of our attention to consider the means which may prevent or diminish their well-known effects on the body. The use of salted meat, though of the best quality, as a principal article of diet, if continued for some time, produces an important change in the state both of the solids and fluids of the human system. The causes of this change are neither obscure nor unknown. But in the nearly putrid state in which salted meat is often used in the army, it contains not only a very small quantity of nourishment

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in proportion to its bulk, but also the seeds of disease; consequently, the change in the constitution occasioned by it, in this state, must be still greater. We formerly remarked that rum possesses no power by which, when daily used, it can counteract the weakening effects of salted provisions; and that, by its constant operation as a deleterious power on the nerves of the stomach, it prevents that organ from adequately performing the process of digestion, and therefore still farther impairs the vigour of the constitution; and this effect will be more powerfully and more certainly exerted, if to indolence and languor of body be added dejection of mind.

But since an army, from necessity, must use a quantity of salted provisions, it is to be desired that we had a substitute for rum, which might render the effects of such a diet less injurious, and might impart both a moderate stimulus, and a quantity of nutritive matter to the system. Malt liquor seems to possess these properties; and we have great reason to believe, that had it been more generally used by the army, in the late war in the West Indies, we should not at that time have had so much reason to lament our inability to act offensively in that quarter, nor should we have

had such cause of apprehension for the safety of our own Islands, from the equal inability of our troops to defend them.

Malt liquor, of whatever kind, is not so generally adulterated as ardent spirits, because the temptation to do so is not so great, and as, on account of the strong impression made by rum on the palate, the presence of any foreign matter in it is not so easily perceived as in malt liquor, whose impression being weaker does not so completely benumb the sense of taste, and therefore in this the adulteration is more readily detected.

British soldiers in general have been accustomed more to the use of malt than of spirituous liquor; the former of which has been proved, by the experience of centuries, to be an invigorating, antiseptic, salutary beverage. Malt liquor, when of a sound body, such as porter or ale, improves in a warm climate, and the substitution of it for rum, among other advantages, may often guard a soldier from the danger arising from the use of bad water, which, in many situations, is so offensive, that a large quantity of ardent spirits can neither correct its flavour nor its taste. But it is well known that malt liquor contains a quantity of saccharine and unassimilated farinaceous

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rinaceous matter, which is highly nutritive. On occasions, therefore, when the use of salted provisions is unavoidable, malt liquor is doubly salutary. It is a powerful preventative of scurvy, which is generally occasioned by the long use of salted meat, whether in a cold or warm climate. But the nutritive matter which it contains affords to the system a degree of support, which it cannot obtain from the usual diet, but which is absolutely necessary to preserve the vigour of the body against the debilitating influence of a tropical climate. Besides the saccharine and farinaceous matter, malt liquor contains a portion of spirit, which is a sufficient stimulus to the body, yet, from being intimately blended with other matters, does not occasion that languor and weakness, which, in almost every instance, follow the excessive use of ardent spirits, in whatever form they are employed. It fortunately happens, that few stomachs can bear such a quantity of some kinds of malt liquor as is necessary to produce intoxication; but when occasioned by this cause, intoxication is neither so dangerous in its immediate consequences, nor are its effects of so long duration, as when it arises from ardent spirits. The ale exported to the West Indies is of a strong body,  
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and violently intoxicating; but when diluted with water, it forms a beverage extremely grateful to an English palate, and salutary to the constitution: as such it is preferred, even by the Creoles themselves, who can afford to purchase it, to that destructive poison, called grog, which is so plentifully used by our soldiers. It may here be observed, that although sudden death is frequently a consequence of the immoderate use of spirituous liquors, yet we do not recollect to have seen an instance recorded of the same effect being occasioned by malt liquor. If such occurrences do happen, we are convinced it is very rarely, not only for the reason just stated, but also as the use of malt liquor seldom gives rise to an habit of drinking to great excess. Yet at the same time, persons in the West Indies, especially the young and the plethoric, ought to be warned against the incautious use of Bristol ale, Bell's beer, or any other strong malt liquor. When moderately diluted with water, these may be drank with safety and advantage. This caution arises from an accident that happened to some officers and myself from the imprudent use of Bristol ale (with the effects of which we were not acquainted.) Being extremely thirsty and fatigued, the ale was eagerly drank, but the  
effects

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effects of it were long and seriously remembered.

Yet from the qualities which malt liquor possesses, and from its known effects on the body, both in health and disease, there is every reason to believe that the substitution of it for rum may be productive of the most beneficial consequences to the community, and to the soldier as an individual. If it is asked, whether the granting an allowance of malt liquor, (porter or ale) will prevent the troops from drinking spirits to excess? I answer, that in all probability it will, as its substitution for a regular daily quantity of spirits, would gradually weaken that habit of drinking them, which we have shewn to be the principal cause of excess. But it may be asked farther, How is a soldier, who has so many opportunities of having intercourse with negroes and hucksters, to be prevented from procuring spirits? To this we answer, that no good regulation, especially one which is to combat vicious and confirmed habits, can be carried into effect without difficulty; but here the difficulty is not so great as may at first appear. If the temptation to use spirits is weakened by the substitution of porter, let the Assembly of the Island pass an act imposing



posing a very severe fine (one half to be given to the informer, and the other to be allotted for the purchase of various articles for the troops) on those persons who make a trade of enticing soldiers to part with their salted provisions, by offering them a quantity of new spirit in exchange, without the knowledge of their officers. There are many persons concerned in this shameful and pernicious traffic, who are not suspected, on account of their station in life, but who might, with ease, be restrained from it by the fear of being exposed in a court of justice. As it might very commonly happen that a person offending against this act would neither be influenced by a sense of shame, nor able to pay the fine, let him be punished by imprisonment for a longer or shorter time, according to the extent of his offence, and let the penalty be encreased as often as a crime of such magnitude is repeated. We have a similar law in Great Britain and Ireland, respecting the purchase of a soldier's necessaries or accoutrements. In the West Indies, and in Ireland, the men have stronger temptations to part with their provisions and their necessaries, than in Britain, owing to the very prevalent use of whiskey, in almost  
every



every county in Ireland, the large quantities in which it is clandestinely manufactured (notwithstanding the vigilance of government), and the consequent facility with which a soldier obtains it. In the West Indies, when a soldier has acquired a habit of drinking, he can procure large quantities of new rum with even more ease than he can whiskey in Ireland; and it may readily be believed, that in those circumstances the temptation to obtain it will not be resisted. In Britain a soldier has an ample allowance of malt liquor, which, in general, being the drink of those with whom he associates, he consequently has fewer inducements to the use of spirits, and therefore seldom acquires an habit of drinking them to excess. Although many exceptions may be brought against this observation, yet it is notwithstanding generally true.

As it is not foreign to the purpose of this treatise, and as it may tend to confirm the general remarks, with regard to the different effects of malt and spirituous liquors, it may not be improper to notice some very serious inconveniencies arising to the army in Ireland from the very prevalent use of whiskey in that country.

From the numerous barracks and forts scattered over the kingdom, Ireland enjoys many advantages for forming a soldier, which Great-Britain does not possess. Yet, as far as I have been able to judge, those advantages are overbalanced by a cause which the efforts of the legislature have hitherto been unable to remove. Although the immoderate use of spirits (owing to various causes) is not so very destructive of the health of the men in Ireland, as that of new rum in the West Indies, yet it totally ruins their morals, and extinguishes all sense of honour and of shame, without which a soldier is a licensed ruffian \*. During some years that I was surgeon of the fifth regiment, quartered in Ireland †, I recollect only three instances of punishment being inflicted in that corps, where the crime was not owing to the excessive use of whisky, occasioning either insolence to officers, and forgetfulness of subordination, neglect of duty, absence from quarters, and rioting in the streets after tattoo-beating, selling shirts, and other necessaries, and that crime, to which men are uniformly driven in Ireland, by the commission of any of the others, the crime of

\* See note H. † See note I.

desertion. The crimes most commonly committed by the men, were, pledging their necessaries for whisky, and stealing those of their comrades for the same purpose. Some of the best men in the regiment were at times drawn into excesses of this kind, of which they heartily repented; but they were common only among those who, having been frequently punished, were indifferent about the good opinion either of their officers or their fellow-soldiers. Some of those unhappy men had so far subdued every emotion of virtuous shame, that they bore, without any other concern than the pain it occasioned, a punishment deservedly severe, and were not affected even by the disgrace of being drummed out of the regiment.

These are some of the effects resulting from the use of whisky among soldiers in Ireland. We have reason to believe, that none of the crimes to which it leads are so common in the army in Britain, where malt liquor is more generally used. It is very seldom that disputes of any consequence arise in England, between the troops and the inhabitants of a town in which they are quartered, compared with the frequency of such occurrences in Ireland. Yet in some towns in that country, where the  
inhabitants

inhabitants are industrious, and consequently sober and discreet in their conduct, disturbances of this kind are seldom heard of. In these the soldier and the citizen generally live happily together; the soldier is not corrupted by bad example; he is not tempted to run into excess; for vice and irregularity seldom take up their residence in the house of the industrious labourer or manufacturer. During five years that I resided in Belfast, in which time five regiments were successively quartered there, no dispute ever arose between the military and the inhabitants; indeed an occurrence of so disagreeable a nature is scarcely remembered to have happened in that town. The lower classes, Protestants and Roman Catholics, are an industrious and sober set of people. London porter can be procured at the same price as in the metropolis; and small beer, of a sound good quality, may be purchased still more reasonably. These two causes may sufficiently explain the reason, why soldiers in general conduct themselves with more propriety in Belfast than in many other quarters, in Ireland, where whisky is more generally used, and where the inhabitants are neither so regular nor industrious as every friend to that country anxiously desires. It may be added, farther,

in confirmation of this remark, that the same soldiers who, in Belfast, received honorary and pecuniary rewards for their general good behaviour, and for their zeal and activity in protecting the property of the inhabitants, were, in Drogheda and in Dublin, frequently involved in very serious disputes with the lower classes of people. Among these, malt liquor is very seldom used; and many, from the habitual, and consequently immoderate use of whisky, have arrived at a state, surpassing any idea we can form, of barbarous ferocity, which cannot be believed, except by those who have witnessed it, and the effects of which the animated and laudable exertions of civil and ecclesiastical authority have hitherto been unable to prevent or restrain.

In a large number, formed by men of dissimilar ages, characters, and pursuits, it cannot be expected that all shall act uniformly well. And the most sedulous attention of an active commanding officer cannot prevent some men from eluding his vigilance, or spurning at his authority. In every regiment, particularly in those on the establishment of Ireland, there are some men who are a disgrace to the service, who are neither to be influenced by lenity, nor restrained by severe punishment from committing



committing a robbery on their officers, by pledging their necessaries for spirituous liquors. But this crime, so hurtful to officers who pay companies, and so pernicious to the health and morals of the men, may often be checked, by inflicting an unusually disgraceful and severe punishment on the culprit, and by the vigilance of the civil magistrate. The frequently levying the penalty imposed, by act of parliament, on those who purchase a soldier's arms or accoutrements, and the depriving a publican of his licence, who receives a soldier's necessaries in pledge for liquor, have often rendered this traffic so dangerous, that although the soldier was willing, the publican dared not to attempt it. And we have great cause to believe, that the utility of this act will be more apparent, if the penalty it imposes is, from mistaken lenity, less frequently remitted. If then an act of this kind is productive of beneficial consequences in Ireland, it will readily be supposed, that a similar one may operate equally in the West Indies, in diminishing the opportunities which soldiers have of using rum to excess in that country.

But although the general custom in the army, in the West Indies, of exchanging provisions for spirituous liquors, is attended with



the most baneful effects, yet a similar traffic, under proper regulations, may be productive of many good consequences. The stomach of a private soldier is often as squeamish, and (if I may be allowed the expression) requires as much coaxing as that of his superior. When its tone is weakened by the constant use of spirits, and the relaxing power of the climate, he looks with disgust on his salted provisions, as if nature in kindness pointed out the impropriety of swallowing food which his digestive powers are unable to convert into wholesome nourishment. The greater part of his beef or pork, therefore, is lost, destroyed, or, more generally, exchanged for new rum. In those circumstances, it might be equally conducive to the interest of Government, and to the welfare of the troops, to destroy any underhand traffic, by encouraging the men openly to exchange their salted provisions with a planter (under the eye of a discreet non-commissioned officer), for fowls, pigs, or any other article of fresh animal food. The married men commonly act in this manner, and are therefore, in general, far more healthy than others. The person, who deals with the troops, never can be at a loss to find a non-commissioned officer, who, if he discharges his duty,

duty, may easily prevent a soldier from obtaining, in exchange for his provisions, any article which may be injurious to his health. In a traffic of this kind, both parties would find their advantage. The planter has a greater number of pigs, kids, fowls, &c. than he has immediate occasion for, but he wants salted provisions for his own use, and for that of other persons on his estate, which he often finds it difficult and expensive to procure. The soldier is tired not only with the sameness of his diet, but also with the sameness of the mode in which it is dressed, and which is the only one that it admits of. But were he encouraged frequently to exchange his salted provisions for any article of fresh animal food, his dislike to them would be lessened, and he would often consume them with satisfaction. His constitution, instead of being destroyed by the immoderate use of spirits, and poor diet, would be supported by grateful and invigorating nourishment. For, I am well assured, that if the troops in the West Indies can be brought to have a liking for their diet, the practice of exchanging provisions for spirituous liquors will be much less frequent.

To state all the advantages that may result from adopting a scheme of this kind, would

greatly exceed the limits of this inquiry. They will readily occur to any person who reflects on the situation of a soldier stationed in a West India island, and does not confound it with that of an army employed on actual service on the Continent of Europe or America, which is in every respect different.

Another mode of preserving the health of our troops may be suggested, and perhaps with propriety adopted, as it is not attended with additional expence, but may occasion a considerable saving to Government,

Owing to the indolent life which soldiers lead in the West Indies, and to other causes, it seldom happens that any one individual consumes the daily allowance of Government provisions. That this is almost invariably the case, even among the most healthy men in young regiments, is too notorious to be denied. A very small quantity of salted pork will satisfy a man, whose appetite is not sharpened by exercise. It may therefore be proper to diminish the quantity of salted provisions, and to apply any saving that may accrue from thence to the providing other articles more necessary and more salutary. By this means, the men may be liberally supplied with tea, cocoa, coffee, or chocolate, which,  
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being

being in their own nature antiseptic, and rendered still more so by the addition of sugar, must be extremely useful when salted meats form a principal part of the diet. The utility of those articles will be farther apparent, when it is considered, that the frequent employment of them tends to wean soldiers from the immoderate use of spirits. A commutation of this kind would not be more acceptable to the men than beneficial to the state.

But, in order to obtain the advantages which may be expected from this mode, it is necessary that the articles of coffee, chocolate, cocoa, or tea, should be prepared by the cooks for the different messes, and served out to the men morning and evening. To those who are unacquainted with the nature of young troops, this precaution may appear of little importance; but the necessity of it is founded on actual observation. An old soldier, who has acquired habits peculiar to the army, has various means of adding to the comfort of his situation, unknown to, or not practised by recruits, who have never experienced any hardship which called forth their ingenuity to alleviate. But even among soldiers lately raised, it may often be remarked, that some of the Irish and Scotch make an hearty morning repast on their allowance

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allowance of oatmeal, which they prepare in different ways, while many English recruits are at a loss for a breakfast, until the example of their comrades, and a desire for their morning meal, have conquered their prejudices, and taught them to have recourse to expedients, with which, from their mode of living in England, they had not been acquainted.

Coffee, cocoa, or chocolate, can be procured in the West India islands at a very reasonable rate. Any of these articles, combined with sugar, is perhaps more nutritive and wholesome, and certainly more palatable, than oatmeal or flour in the state in which they are frequently delivered to the army. We therefore have no doubt in urging the propriety of granting an allowance of those articles to our troops in the West Indies. They can be more easily procured than oatmeal, or flour, are equally nutritive, and not so apt to be used in an unsound state; and, by diminishing the quantity of salted provisions, they may be issued with great satisfaction to the men, and without any additional expence to Government.

From some facts which were formerly stated, we may easily determine how important it is, that a soldier in the West Indies, before



fore he is ordered on any duty of fatigue, in the morning, should receive a quantity of nourishment. In a climate which has a tendency to diminish the energy and tone of the system, the body, after sleep, until recruited by food, is in a state of great inanition, and incapable with impunity even of a moderate degree of exertion. But an unexperienced soldier will be much less liable to suffer from long fasting, if a breakfast is prepared for him, than if either the providing or preparing the articles of which it should consist, is left to his own judgement.

Another means of preserving the health of soldiers in the West Indies, may be procured in time of war with little trouble, and at an inconsiderable expence, if the mode of providing it, hereafter recommended, shall be adopted.

From the experience of many persons who have resided a long time in the West Indies, there can be no hesitation in considering the moderate use of wine, as one of the best preservatives of health. A quantity of wine, therefore, larger or smaller, according to its quality, ought to be distributed among the healthy troops on different occasions, as a preventative of disease. It has unfortunately happened,



pened, that while no expence or attention is spared to relieve a soldier when ill, the mode of preventing diseases has been either an object of secondary consideration, or has been altogether overlooked. A soldier, when in a fever, or in a state of convalescence, generally uses a much larger quantity of wine, often without the preservation of life, or the renewal of strength, than, if judiciously given, might have preserved him in a state of health and vigour.

Although the advantages to be derived from wine, as a preservative of health, will be readily admitted, yet an objection may be raised to the use of it, on account of the expence of procuring it. This objection may sometimes be forcible, yet it is not equally so on all occasions. On the contrary, the expence is often so inconsiderable, that it ought not to be put in competition with the utility of wine in preventing diseases. But we shall endeavour to prove, that the expence of it at all times may be considerably lessened by a little attention on the part of Government. In time of war, many of the enemy's vessels are brought into the different ports in the West India islands, laden with various kinds of wine, which is sold generally at a moderate, and often at a low price. Some contractors, when  
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the market is overstocked, and the price consequently very low, purchase large quantities of prize wine, with which they often supply the navy and army, at the rate of three or four hundred per cent. profit to themselves. We knew an instance in the late war, of two hogsheds of prize claret being purchased, at a sale in Kingston, by an officer, for the use of his companions in the mess, at the rate of seven pounds Jamaica currency each hogshhead. Had this wine been purchased, by some contractors for Government, twenty-five pounds British would not have been deemed an unreasonable charge. This will not appear improbable, when it is mentioned, that the tavern-keepers in Kingston and Spanish-town made a practice of charging fifteen shillings currency (about half a guinea) for a bottle of the same wine.

The consequence, therefore, of the customary mode of supplying the forces in the West Indies with wine, is, that being found a very expensive article to Government, it cannot be distributed in the quantity in which it ought to be. It certainly is desirable to avoid this inconvenience in point of expence, and that the troops may frequently be supplied with such a quantity of wine as may conduce  
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to the preservation of health. I beg leave,  
therefore, to suggest the following hints, for  
farther consideration, as they may probably  
lead to the attainment of both these ends.

From frequently reflecting on this subject,  
it appears to me, that it may be of advantage  
to Government to appoint an agent, whose bu-  
siness shall consist in attending to the sales of  
prize wines, and in embracing every opportu-  
nity of purchasing them for the use of the  
forces when at a low price. But, as it is im-  
possible for any administration to guard against  
the extortion of one unprincipled individual,  
who loses sight of his oath in pursuit of his  
interest, and as defrauding Government is  
looked upon as a crime of a very venial na-  
ture, by men of lax morality, the state must  
always be exposed to a greater or lesser degree  
of injury and loss in the contracts it forms with  
most individuals. To avoid this, in the case  
we are considering, I suggest the propriety of  
appointing the office of agent for Government  
to be executed by the body of officers in each  
regiment, who should be impowered to pur-  
chase at the cheapest rate, wine, fresh provi-  
sions, wholesome vegetables, and various other  
articles for the regiment to which they be-  
long. It is not to be supposed that all the of-  
ficers

ficers of a regiment will concur in defrauding their country, by overcharging the articles which they purchase for their men. Against this, a regard for their own honour is a powerful preventative; but if, in the breast of any individual, the sense of honour is asleep, the facility of detecting a fraud, and the infamy consequent on detection, must operate as a powerful bar against every species of extortion or peculation. To carry this scheme into effect, we propose, that from among the officers of a corps, an acting Committee be appointed, consisting of a certain number, to be changed quarterly or half-yearly, as may be convenient; the senior officer to preside, and the others to take their seats according to the mode adopted in regimental courts-martial. The books of the Committee, containing an account of all purchases, with the real price paid, and the name of the person to whom paid, should be open to the inspection of all the officers of the regiment. When a new Committee is appointed, the accounts of the former should be signed by the officers who composed it: and the accounts of the different quarterly or half-yearly Committees should be vouched by the signature of the commanding officer and paymaster, and annually trans-

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mitted to the war office or regimental agent. It may be proper, that the duty of the Committee should not be taken by officers in rotation, for otherwise it might happen that young unexperienced men might be called to the performance of a duty with which they are unacquainted, and to which they cannot pay attention. And, as it might also happen that some officers of superior fortune, or more advanced in life, though adequate to the task, may be either averse to, or negligent in the performance of it, it may be adviseable that the Committee shall consist of officers of confirmed steadiness and integrity, elected by the officers of the regiment, who, from personal knowledge, can determine what men are best fitted for the office. The Committee, on account of the saving which may accrue to Government from their attention, should be allowed additional pay, as a recompence for their additional trouble, and as an incitement to the active discharge of their duty. Let it not be supposed, that it is degrading the character of a British officer to be employed in procuring the means of preserving the health, and of adding to the comfort of those men who look to him for protection, and on whose gallant efforts in the field he must raise the pillar  
of



of his fame. A brave and generous man will eagerly embrace the opportunity of acting thus honourably to himself, and advantageously to his country; he will be rewarded by the approbation of his own mind, the concurring approbation of every man to whom he is known, and by the grateful affection of those under his command, to whom, by his kindness, he is endeared, and who will part with life rather than desert him in the hour of danger or defeat.

I have thus given the outlines of a plan, which (so far as I can judge), if carried into execution, may be productive of many beneficial consequences to our troops in the West Indies, both in the time of peace and of war. The advantages to be derived from this or a similar plan, are not more numerous than different. It may be allowable to state some, in confirmation of this remark.

It may be a great means of checking extortion, which, though well known to exist, cannot often be detected. It might consequently enable Government, without the risque of being overcharged, to supply our troops with various articles essential both to their health and comfort, the latter deserving attention as well as the former. Those articles cannot be

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afforded



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afforded by Government in time of war, not on account of the real price of them, but on account of the exorbitant sum charged by those who are appointed to provide them. These are certainly important advantages; but, independant of these, a plan of this kind, besides strengthening the tie between a soldier and his officer, must render the latter, in the discharge of his duty, more anxious, than any commissary can be, to procure for the men such articles of diet as are known to be wholesome and nutritive in their soundest and best state. And, as the health of the men might then depend in a great measure on the attention of their officers, these might be induced to exert their authority, in a more effectual manne, to restrain those under their command from the use of spirituous liquors, or from any other species of food or drink, which is known to be detrimental to health.

We do not suppose that any scheme of this kind can be effectually carried into execution, when troops are engaged in actual service. But when several regiments are sent to defend an island against the meditated attack of an enemy, as was the case not only in Jamaica, but in every other island in the West Indies, during three years of the late war, this or a similar

similar mode may be adopted with singular benefit to the army and the state. Our troops, instead of being borne down by disease, and dispirited by the daily mortality among their comrades, may then be enabled to execute the services expected from them, the objection to the employment of young troops may in a great measure be done away, and Government have less cause to be apprehensive for the safety of the settlements intrusted to their protection.

Having enumerated some of the means of preserving the health of soldiers in the West Indies, I now venture, with diffidence, to state an opinion with regard to the general manner of living that may be most beneficial to officers, and soldiers newly raised, especially on their first arrival, after having been for some months on board of transports. This opinion is founded on my own observation, on the experience of discerning men, and on attentive consideration of the subject.

Owing to the manner in which officers in general live, it is proper, that on their arrival in the West Indies they should make some diminution in the quantity, and some alteration in the quality of their diet. A full, rich, and stimulating diet, may have been used with im-

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punity in England; but it is contrary both to reason and fact to suppose that such a diet can be employed with equal impunity, by an English constitution, before it is in some measure naturalized to the climate of the West Indies. A diet of this kind, when accompanied with little exercise, always occasions a considerably plethoric state of the system, which, even in England, is a predisponent cause of many complaints, particularly of those of an inflammatory nature; but in the West Indies it is, if the expression may be allowed, a still more actively predisponent cause of diseases of an opposite kind, more rapid in their progress, and commonly more fatal in their termination, than the disorders to which it gives rise in this country. It would be foreign to our present purpose to enter here into an elaborate medical disquisition, otherwise we could give very satisfactory reasons why a plethoric state of the body must be particularly injurious in a hot climate, and therefore ought to be carefully guarded against by officers, especially for some time after their arrival. Some West India practitioners, aware of the consequences to which this state exposes *new-comers*, use the lancet very

freely to remove it, but often very injudiciously, from not recollecting that frequent bleeding has an evident tendency to occasion that state of the system which they wish to avoid. The safest mode of guarding against a state of plethora, is by diminishing the quantity of a rich nutritive diet of animal food, and by employing a greater than usual quantity of vegetable aliment, which affords nutriment well adapted to the state of the body in a hot climate. A diet, consisting chiefly of vegetable matters, affords sufficient nourishment, and is not apt to occasion plethora, but on the contrary is often judiciously ordered to obviate the effects of plethora, or to diminish excessive corpulency.

Yet, while we caution officers against too full living, we are far from inculcating an abstemiousness equally hurtful. Those who have been accustomed to wine will find, that a moderate use of it is a better and more agreeable preservative of health than the medicines of an apothecary. But it cannot be too strongly recommended to abstain from spirituous liquors in the evening, after a full dinner, and drinking wine in any quantity approaching to excess. This caution is the more

necessary, as such irregularities are too often incautiously committed, and, in an unfavourable climate, are often productive of the most lamentable consequences. On these occasions, instead of having recourse to spirituous liquors, the moderate evacuation of the contents of the stomach, and a few hours of sleep, may often guard a person against effects, which a long life of the most rigid temperance and care may be unable to remove, or even to alleviate. According to the manner of living, which for a great length of time has been very general in Britain among people in a superior line, supper is not considered as a principal meal; and the experience of many confirms the remark, that the less the body is stimulated or oppressed, at bed-time, by food or drink, the sleep will be more refreshing, the constitution less debilitated, and consequently not so apt to suffer from the irregularity of the preceding day.

Persons in the West Indies, who enjoy good health, have frequently a keen appetite, and are consequently tempted to indulge themselves in, what is called, a second breakfast. This repast is taken about noon and generally consists of animal food, accompanied with porter, grog, or wine and water. After an interval



of a few hours, those persons sit down to a plentiful dinner, at which, the variety of dishes exciting some renewal of appetite, they are often led to eat more than nature either requires, or can bear with impunity. Some constitutions may not be apparently injured by this practice; but the generality of men always suffer more or less from it, and often very severely. If any refreshment in the forenoon be necessary, as it usually is for persons in good health, great attention should be paid to avoid excess in quantity, and also to the articles constituting this repast, which should be of such a nature, that, while they impart a temporary degree of vigour, may be easily digested, and may leave the body free from their effects on the approach of the usual hour of dinner. A glass of wine and water, or a glass or two of sound Madeira, with a piece of bread, will sufficiently answer these purposes, and will be found less oppressive to the system than the articles commonly employed on those occasions, and may therefore, with great propriety, be recommended.

On a superficial view, this subject may seem to be of little importance; but it appears to me in a very different light. For, so far as my observation enables me to judge, the diseases



both of officers and private soldiers, in the West Indies, more frequently arise from causes of seemingly inconsiderable power, than from those which are deemed of a more formidable nature. I can assert from experience, that inattention to the advice above given, has materially injured the health of many fine young men, who, with a little care, might have avoided complaints productive of lasting uneasiness and regret. But, besides being less injurious to health, the means of refreshment we have advised may be procured at a very small expence, compared with that which is commonly incurred for the same purpose. The value of this advantage can easily be estimated, by officers who are acquainted with, and who have suffered from the enormous expence to which they are exposed when quartered in some towns in a West India island.

The danger to which the health of a private soldier is exposed, arises from a cause very different from that which is generally inimical to the health of an officer. The diet of the former is of a nature at all times ill suited to a warm climate, more especially if the articles composing it are of a bad quality, which is too frequently the case. He is therefore more liable to suffer from a *want of due nourishment* ;

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as his usual food, for the reasons formerly given, is not taken in sufficient quantity to afford a supply of nutriment adequate to the waste of the body. The general healthy state of married soldiers in the West Indies, who have prudent wives, and of the officers servants, who commonly live better than their comrades, may be urged in proof of this remark. To obviate the consequences frequently arising from this cause, we think it only necessary to advise adopting the means formerly recommended, of procuring for the army nourishment in proper quantity, and of a nature adapted to their situation in an unfavourable climate; and at the same time endeavouring to put a stop to the habitual use of rum, which always leads to its being employed in immoderate quantity, occasioning the most fatal effects.

It now remains only to consider one circumstance, which may appear to contain an objection of some weight against the general purport of these observations. It has been remarked, that sailors on a cruize in the West Indies, are more healthy, in general, than when in harbour, or on shore. If the remark be just, and we believe it is, it may afford an additional reason for supposing that the bad  
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health of the British forces is to be ascribed, perhaps, rather to an improper mode of living than to the insalubrity of the climate. A great part of a sailor's diet, when on a cruize, consists of salted provisions, and he uses daily a quantity of rum, without apparent injury to his health. This may be true; but it does not invalidate the observations formerly made with regard to the use of spirituous liquors among soldiers, who, when in the same circumstances with sailors, enjoy equal health. But sailors, cruizing in a ship of war, when due attention is paid to cleanliness and other circumstances, are in a situation infinitely more advantageous to health than that of troops who are doing duty on shore. A sailor, however ardently he may desire it, cannot often procure more than the quantity of rum allowed to him by Government, and which is generally of a good quality. He seldom has more, except on uncommon occasions, when a moderate increase of the usual allowance is proper and necessary. He always enjoys alternate labour and rest, unless at times when the exertions of every man on board are required; and he has an ample allowance of water, which is procured without difficulty. This is an advantage of no small importance;  
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for we have known many instances of soldiers being exceedingly injured by bringing water for their own consumption, on some occasions, at the distance of a mile from their camp or quarters.

But the most material difference between the situation of troops on shore (especially if lately raised), and sailors on board a ship of war, consists in a circumstance which has been little attended to, but which has great influence in preserving health, and in restoring it when injured. We shall state this circumstance fully, as, with the others above noticed, it may sufficiently explain, to those who have attended to the influence of the mind on the body, the cause of difference, in point of health, between sailors and soldiers, natives of the same country, doing duty in the same climate, and supported by diet the principal constituent parts of which are the same.

The mind of a soldier is too little employed by his duty : occasionally mounting guard, attending parade morning and evening, with the injurious and often unnecessary fatigue of a field-day, constitute the whole duty of a soldier in a West India island, even in time of war, unless that island is attacked by an enemy. This duty, by repetition, becomes so familiar,

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miliar, as to occasion little trouble; it fatigues by its sameness, and affords no exciting object for the mind to rest upon. To-day a private soldier is sentry at the hospital, where he beholds a man struggling in a fever, who yesterday was his companion in the ranks; perhaps he is called upon to-morrow as being among those who are first on duty for a funeral party. The consequence is obvious: he becomes dejected and melancholy: from this state he is roused for a time by the exhilarating effects of his daily allowance of rum: but those effects being soon over, he eagerly endeavours to procure such a quantity as may drive him into a state of insensibility. If this cannot be obtained, he relapses into his former state of languor and dejection, his body being then in a state to be acted upon by every cause of disease. If, in this situation, he is attacked by illness, the derangement of his body increases the dejection of his mind, which is not lessened by recollecting the fate of many comrades whom he has attended to the grave. He fancies himself to be in the same situation in which he saw them, and believes that the event will be the same. He parts with every hope of life; and art may attempt, but seldom will succeed in preserving him from that fate  
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to which he seems to be impelled, rather by an unaccountable and strong fatuity of mind, than by the violence of bodily disease.

This is no fanciful representation of the condition of soldiers in some newly-raised regiments, which, in the late war, were sent to defend our West India islands. It was strongly exemplified at Port Antonio, in Jamaica, in a detachment of the regiment to which I belonged; where, in the course of a few months, several instances of suicide happened, which could be ascribed to no other cause than an uncommon dejection of mind, and a longing after their native country, arising from the unhappy men being totally unemployed, and reflecting always on, what they thought, their hopeless situation \*.

The state of a sailor in the West Indies is very different. When on duty, his faculties must be constantly awake. He knows not the moment when he may be called on to execute the orders of his officer; but he knows that if those orders are neglected, or performed in a slovenly manner, a severe punishment will be the consequence of his inattention. He is acting in a profession to

\* See note K.

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which he has been bred from his early years. In time of war, he is in constant expectation of attacking or defending himself against his enemy : he is animated with the hope of taking a prize, and the hardships of his situation, having become familiar through time, seldom excite much reflection. Hence his spirit possesses a degree of elasticity, which enables his body to resist, with vigour, the action of many causes of disease which affect the indolent and dejected. Even although he has been pressed into the King's service, he does not change his profession, and he still associates with those whose dispositions, manners, and customs, are similar to his own. The *Esprit de corps* soon obliterates the remembrance of his having been impressed, a misfortune which he knows is entailed on his profession, and to which, since he could not avoid it, he commonly submits with sullen indifference. This, we believe, is the case with the generality of sailors : it may not be improper to contrast it a little more with that of newly-raised troops.

The sending regiments, lately raised, to the West Indies, has been a common practice in time of war : but sad, and dearly-bought experience, ought now to convince us, that it is a most impolitic measure, scarcely to be justified

tified even by the most urgent necessity, and never to be excused, if those regiments are to carry on a defensive war in that country, especially in the manner in which they were obliged to act in our late contest. It requires some time, even in England, until recruits, taken from the plough, or from any mechanical profession, can acquire either the habits or ideas of a soldier, or until they can be reconciled to their situation, although associating with men who have been many years in the army. But when a large body of such men, unmixed with old soldiers, is suddenly assembled to form a regiment, it must require a still longer space of time to reduce this heterogeneous mass into a body, which can be considered as effective, or advantageous to the state. It is well known, that in the hurry of raising new regiments on an emergency, every art is employed, by the lowest and most despicable wretches, to entrap the intoxicated, the ignorant, and those, who, from some silly cause of discontent, have deserted a business to which they embrace the first opportunity of returning. The consequences of sending such a body of men on foreign service, may be easily imagined. Sorrow for their imprudence, regret at leaving their native country, and dislike

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to their situation, take possession of their minds, while mutual complainings increase the general discontent. When sent to act offensively, their native spirit may sometimes supply the want of discipline; and the prospect of being speedily engaged with an enemy, by affording a constant subject of conversation, excite that spirit, and may prevent any murmuring at their situation. But if no exciting object is presented to their minds, their spirit gives way; every slight inconvenience is magnified into an hardship, and suggests a comparison between their former and present situation, highly disadvantageous to the latter. Indolence, and dejection of mind, give birth to diseases, and render them equally expensive and ineffective to the country.

This is not exactly the state of every new corps, but those who have had opportunities of making observations on the subject, will admit, that we have fairly represented the state of the greater part, and especially of those recruits who are enlisted in and about the metropolis, and in the manufacturing towns of England. But the observations we have offered, apply less to the state of newly-raised Highland regiments, than to that of others.

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Among the former, the similitude of customs, language, and manners, has a powerful effect in reconciling them to their new mode of life, and especially the attachment of country, which seldom operates much among English soldiers, except when they are on service with foreign troops \*.

For a farther illustration of the impolicy of sending young regiments to garrison a West India island, we refer to the notes subjoined to this treatise.

From the account we have given, it will appear that a sailor enjoys many advantages which a soldier does not possess, and must consequently be more healthy, provided due attention be paid to enable him to reap the full benefit which those advantages may afford. It will also appear, that a diet, consisting chiefly of salted provisions, with the usual allowance of spirituous liquors, is less prejudicial, even in an unfavourable climate, to those who, in general, breathe a more cool and pure air at sea, who enjoy alternate labour and rest, whose bodies are therefore invigorated by regular exercise, and whose minds are animated with the hope of bettering their situation, than it is to soldiers doing duty in the West Indies

\* See *Essays* by D. Hume, Esq. vol. i. page 215.

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(in the particular circumstances we have stated), where idleness, improper diet, and the absence of every animating emotion of mind, or rather the constant operation of depressing passions co-operate in rendering the body an unresisting victim of various diseases. But when sailors are in harbour, or in similar circumstances with soldiers, they are often extremely unhealthy, owing to the same causes which injure the health of the army.

It may be proper, in this place, to make some observations, arising from the subject we have been considering, which, although they chiefly relate to the distribution of our force in the West Indies, have also in view the preservation of the health of the troops.

In the late very extensive war, owing to an uncommon and unforeseen combination of untoward circumstances, it was scarcely possible that England could adequately defend her own dominions, and effectually annoy those of her enemy. But as, while Britain holds any possessions in the West Indies, some scenes in the tragedy of every war in which she is engaged must be performed in that country, we cannot be too attentive to the means of rendering our force as efficient as possible, in proportion to the number of men who compose it: especially as too rigid adherence to established customs; originally



originally adopted without due consideration, and inattention to circumstances of apparently slight importance, have frequently contributed to render our force inadequate to any useful purpose.

The manner in which our troops were distributed in the West Indies, during the late war, obliged them to act always on the defensive. The attack of St. Lucia, of Fort Omoa, and the unfortunate expedition against Fort St. Juan's, in South America, which had nearly paved the way for the loss of Jamaica, were the only instances of offensive operations in which we were engaged in that part of the world. We do not consider the capture of St. Eustatius, where an enemy made no resistance, or the abortive attempt against St. Vincent's, where we saw the enemy and retired, as instances of offensive operation deserving attention. Yet no other expeditions were or could be undertaken; for it unfortunately happened that our troops, so far from being able to act offensively, were, from being scattered through the islands in small numbers, absolutely inadequate to defend the settlements intrusted to their care. The consequence was, that, except in the instance of St. Lucia, the French took from us every

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island they attacked. The small number of our troops, and the manner in which they were distributed, prevented us from availing ourselves of any accidental superiority of our naval force, and were the great causes of the facility with which the enemy deprived us of our possessions. Another cause was, that the French had generally a large body of land forces on board their fleet, and were thereby enabled to catch every opportunity that presented of pouring a vast number of troops into our islands, the force to defend which being greatly inferior in number to that of the invaders, the island was compelled to surrender, without our fleet being able to afford it any effectual assistance, even although our naval strength was not inferior to that of the enemy. The circumstances which attended the capture of Grenada, Tobago, St. Christopher's, and we believe St. Vincent's and Dominica, justify us in ascribing the loss of these islands to the causes we have mentioned.

It well deserves our attention, to endeavour to obviate the similar operation of those causes in any future war. Among other means employed for this purpose, it may be proper, instead of cooping up our soldiers in  
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a West India Island, which from their numbers they are unable to defend, and where they are daily falling victims to disease, to adopt the policy of France, and to order several regiments to take alternately a routine of duty on board of ships of war; and, by giving the army a share of prize money, to blend, as much as possible, the military with the naval force of the country. Those who are fond of extolling the utility of the navy, at the expence of the army, seem to be actuated rather by prejudice than by accurate observation or sound reason. The experience of last war sufficiently proved, that a large fleet in the West Indies, without land forces, was unable to protect our settlements, and was prevented by the same cause from attempting any act which might draw the attention of the enemy to the defence of their own possessions.

Whatever objections may be urged to the plan we have recommended, it is very probable that the following advantages may be derived from it.

By encreasing the aggregate strength of our armaments, it will supply a force equal to the defence of our own islands, and capable of acting with effect, when an opportunity offers of

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distressing the enemy. By having such a force constantly afloat, we may convince our foes, that we can injure, and may induce them to pay more attention to defend themselves than to attack the possessions of Britain: especially as they know that their own are vulnerable in many quarters, and cannot determine against which that force may be directed. The expence and the incumbrance of transports may be lessened, and, by giving soldiers a share of prize money, the interest of the navy and army may be considered as the same, and that union established so essential to the success of every expedition in which they are jointly engaged.

Another advantage to be obtained from this plan is, the preserving the health and vigour of our troops. This will sufficiently appear from the reasons formerly given, and to which we refer.

Several objections have been advanced against the proposal of uniting the navy and army into one body in the West Indies. I do not think it necessary to enter here, either into the enumeration or refutation of those objections. As far as I can judge, they are founded on private motives, or they have arisen from a very imperfect consideration of  
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the subject. It is difficult to divest the generality of mankind of opinions, which, though hastily and inconsiderately adopted, have long been pertinaciously maintained, and are regarded with affection as the children of the mind : but professional prejudices generally cling so closely to our breasts, that the power of the most rational argument is not only unable to tear them away, but even cannot prevent them from warping the understanding into a belief that they are founded in reason, and are not to be removed.



## C O N C L U S I O N.

**H**AVING considered at some length various means of preserving the health of the army in the West Indies, it may be proper, before we conclude, to bring them under one point of view, recapitulating, in the first place, some general remarks for the clearer elucidation of our subject.

1st. The causes predisposing soldiers to complaints in the West Indies, seem to be owing more generally to irregularity and inattention, and to the nature of their diet, than to any particularly noxious power in the climate.

2dly. The articles composing the general diet of soldiers, are at all times prejudicial to health, except when a great deal of exercise is used, and the power of the digestive organs is unimpaired, and capable of subduing them; but those articles are especially injurious in the West Indies, because,

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3dly. Where the waste of the body is great, and the organs of digestion weak, they do not afford sufficient nourishment, nor can the nourishment they impart be wholesome to men not accustomed to the use of food in nearly a putrid state ; besides, the sameness of the food, and of the manner of dressing it, excites aversion among men whose appetite is not sharpened by bodily exercise or by mental exertion, and consequently it is not used in the necessary quantity to supply nutriment in proportion to the waste.

The principal means of preserving the health of British officers and soldiers in the West Indies, especially of those who are sent to that country in time of war, may be comprised under the following heads.

Attention on the part of Government, that provisions intended for troops in the West Indies be preserved with purified salt, instead of that commonly used : and also that the quality of the meat be examined before it is cured ; for it appears that some persons have supposed their contract to be fulfilled, if they supplied the quantity, regardless of the quality of provisions which Government required : hence, from inattention or design, unsound cattle and hogs have been purchased at a low price,

price, and cured for the use of the navy and army: the flesh of such animals, when killed, is in a highly putrescent state, and the mode of curing, instead of preserving it, increases the tendency of it to putrefaction; consequently, many casks of provisions are every week condemned as unfit for use; or those provisions, through inattention, are served out to the men, and occasion the most ruinous effects to the individual, and to the state.

Another means of preserving health, may be derived from substituting malt liquor for the usual allowance of rum. The propriety of this measure will be obvious, from what was formerly stated with regard to the comparative effects of malt and spirituous liquors on the human body, especially when the principal articles of diet consist of salted meats. We may add, that three pints of London porter may be afforded by Government at nearly the same expence as the daily allowance of half a pint of rum, at four shillings the gallon.

As the usual allowance of salted provisions is seldom consumed, it may be proper to diminish the quantity in which these are served out, and to issue a certain portion of other articles, which may occasion some variety in the general diet, and may render it more wholesome.

some. Such articles are sugar, tea, coffee, and especially chocolate, which, containing a considerable quantity of vegetable oil, may form a useful substitute for salt butter, which is often used in a very rancid state, and occasions, in many constitutions, severe affections of the stomach and bowels.

We have formerly observed, that private soldiers, for various reasons, are particularly apt to suffer from inanition. Instead of persevering, therefore, in the old plan, it may be right to adopt the means above stated, as it is probable that soldiers may thereby obtain a sufficient quantity of nourishment, of a wholesome quality, and consequently that their health may be more effectually preserved.

The supplying soldiers with wine, when an opportunity offers of procuring it at a moderate price, and encouraging them frequently, under the inspection of their officers, to exchange their provisions for other articles of wholesome vegetable or fresh animal food, in the manner we have suggested, may contribute to effect the same purpose.

We cannot too strongly inculcate the necessity of constant employment, either of body or mind, especially for newly-raised troops, as a powerful means of preserving health, provided

vided that bodily exercise be not carried to the length of occasioning fatigue, a considerable degree of which, however, may be borne with impunity, when the body is supported by proper diet.

The West Indies have been emphatically, and often too justly, stiled the grave of the British army. To what causes is it owing, that the same mortality does not happen among our troops on the continent of Asia? As I never was in the East Indies, I am incompetent to a solution of the question, but I believe those causes are not of very difficult discovery.

Although we omitted to notice it in the proper place, we may here be allowed to recommend a mode of supplying the army with a very wholesome article of food, which can be carried into execution at an inconsiderable expence. It is well known that fish of different kinds abound in great quantity, in different parts, on the coasts of the West India islands. Many planters, who reside on the coasts, avail themselves of this advantage. They breed negroes to the profession of fishermen, many of whom are very expert, and consequently highly valuable, as their labour not only supplies the planter with fish for the consumption of his own family and slaves, but al-



so with a quantity for sale among his neighbours, in the more inland parts of the island. The experience of all nations proves, that white fish constitute one of the most wholesome, digestible, and nourishing articles of animal food, and those persons who have been confined for some time to salted provisions, know well how very gratefully an accidental supply of fresh fish is received.

We therefore submit to the consideration of others, the propriety of Government's purchasing a number of experienced negro fishermen, and of young negroes, who may be bred to that profession; of supplying them with boats, nets, and the materials requisite for carrying on their business, and of attaching a certain number of those fishermen to each detachment of the army that may be quartered on the coast of the different islands, for the purpose of occasionally supplying the king's troops with wholesome and nourishing provisions. The expence incurred for this purpose, by the purchase of negroes, boats, nets, and the other requisites, would in a very short time be repaid, even by the saving occasioned by this mode, in the expenditure of provisions sent from Europe; but even if the expence should not be repaid, when we consider  
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the necessity of supporting foldiers, in an unfavourable climate, by nourishing and salutary diet, it must be ill-judging parsimony, indeed, that could regret that expence.

To conclude the observations I have to offer on the means of preserving the health of the British army in the West Indies, I have only to recommend to officers earnestly to avoid the extremes of abstemiousness and excess;—to use wine in moderation;—and, on their first arrival, to be more abstemious, in point of eating and drinking, than they have commonly been. I particularly advise them to abstain from spirituous liquors after eating a hearty dinner, and using wine in any quantity approaching to excess: the consequences of this species of irregularity are frequently speedily fatal: but if they are not, I know, from the sufferings of many friends and acquaintances, that this manner of living lays the foundation of complaints (especially among those who have suffered from the venereal disease, or the injudicious use of mercury), which neither their native air (so generally recommended by West India practitioners), nor the attention of their physicians have for many years been able to remove. To officers who are in the flower of youth and health, we cannot too

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strongly inculcate the avoiding indulgence of appetite to its full extent, especially with large quantities of animal food, or with any other articles of a highly stimulating quality. They will find it more advantageous to health, to make vegetable matter form a larger than ordinary portion of diet: young men are more liable to suffer from excess of every kind, than those who are more advanced in life, both because the latter in general have more prudence, and are less apt to be guilty of irregularities than the younger part of the army, and, as from the change that has taken place in the constitution, persons at the state of complete manhood, and for some time after that period, though apparently of a delicate habit, often bear the effects of occasional irregularity with impunity, while, from the same excess, the young, florid, and robust, suffer in the most serious manner. The condition of the generality of officers and private soldiers, who died in Jamaica last war, justifies the remark we have offered.

Attention to the above simple precepts, with regard to diet, may, I am convinced, often be the means of saving a valuable officer to his country and his friends.

I do not know any medicines that possess the power of preserving health. A quantity  
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of the infusion of bark or bitters is often prescribed to be taken in the morning, and, to persons recovering from disease, may be very useful; but we well know, that the continued use of bark, or bitters of any kind, materially injures the tone of the stomach \*. I therefore recommend to those who enjoy good health in the West Indies, instead of having recourse to medicines to preserve it, to rise early, to eat a hearty breakfast, and to refrain as much as possible from medicines, until either bad health, or some disorder of the system, may render them necessary. Medicines taken to preserve health, frequently occasion much trouble and uneasiness, that might otherwise have been avoided, and are commonly of little benefit in cases of disease, when their efficacy is most to be desired. To those who are fond of using medicines when in health, I recommend a serious consideration of the epitaph, written by an Italian nobleman, for himself, and engraved on his tomb-stone, “*Stavo ben, volevo star meglio, sto qui.*”—“I was well, I wished to be better, and here I am.” We can produce several instances, at this moment, of persons who are seldom, for the space of a week, free from complaints, owing to the practice of

\* See Cullen's *Mat. Med.* to 4to. edit. part ii. chap. ii.

having

having recourse, on the most trifling occasions, to remedies of considerable efficacy, with the effects of which, and with the circumstances of the constitution which indicate or forbid the use of those remedies, they are totally unacquainted. If a physician, who has been many years versant in the treatment of diseases, who, to great attention, adds an accurately observing mind, is sometimes at a loss to determine the nature of a complaint, and may consequently be led to prescribe injudiciously, how much more frequently must it happen, that a person shall do mischief, who, trusting to his own knowledge, takes at random a remedy of powerful efficacy, or prescribes it to others, unacquainted as he is with the anatomy of the human body, with the action of medicines, farther than their immediate effect, and, from his ignorance of diseases, incapable of discriminating one from another, where there is a similarity of symptoms? for, it may be observed, that many dangerous complaints are ushered in with symptoms of a very equivocal nature, and that often some days elapse before the disease assumes its peculiarly characteristic appearance. It has been asserted, that every man, at the age of forty, is capable of being his own physician. I deny

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the assertion as absurd; and I maintain, from my own experience, and from the information of physicians who have had longer experience, and consequently more opportunities of making observations, that too great a belief of this assertion has been, to many, productive of the most serious and unavailing repentance. Every man knows, or ought to know, what articles of diet agree or disagree with his constitution; he may likewise know that a few grains of ipecacuanha will excite vomiting, and that Glauber's salt will operate as a cathartic; that opium occasions the state of sleep, and that mercury cures the venereal disease: thus far I allow his medical knowledge to extend, and it is equal to that of the shop-boy of an apothecary. But, does he know the state of the frame, to ascertain whether the use of these, or other remedies, may be injurious or beneficial? Can he adapt his remedies to the variations that occur in the progress of a disease? Can he distinguish the effects of the remedy from the symptoms connected with the original disease? Does he know, that although opium produces sleep, and a cessation of pain, yet that opium is a very injurious remedy in many diseases where sleep, and the absence of pain, are most anxiously desired? Does he

know,

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know, that, in particular stages of those diseases, opium is a very useful remedy, and cannot be dispensed with? It is unnecessary to say more on this subject: when these questions are resolved by a man of forty years of age, who has not been bred to the medical profession, we will allow him to be his own physician,

— erit mihi magnus Apollo.

Of late years, we have had several treatises published, pretending to diffuse among mankind a general knowledge of the treatment of diseases; and we also have books which promise to make every man his own lawyer. It is not doubted, that such books have been written with a very good intention, but daily experience shews, that they have not answered the purposes which their authors had in view: for, although on some occasions they may have been useful to the few of superior understanding, yet, by the self-confidence they inspire, they have been injurious to the many, and have often rendered the assistance of a lawyer or physician necessary, when otherwise it might not have been wanted. I therefore most earnestly dissuade officers from using medicines of any kind, with a view to the preservation of

I 2 health,

health, without the advice of the regimental surgeon, or of some other medical man, in whose judgment they can confide; and I also recommend to them, not to depend on their own judgement for determining the circumstances that may render the having recourse to active medicines useful or improper. These observations, on a subject apparently unimportant, arise from a conviction, which repeated experience has impressed on my mind, of the dangerous, and often fatal consequences, proceeding from persons attempting to remove complaints, with the nature of which, and of the remedies employed, they are altogether unacquainted.

On the different subjects we have been considering in this inquiry, I have conversed with many sensible and well-informed men in the army, and in the medical profession; with men who have stated, and who have confirmed facts which pressed on the observation even of the most inattentive mind. I am therefore more emboldened, in giving it as my opinion, that the destructive mortality in the British army in the West Indies is chiefly to be ascribed to the manner in which our troops are victualled; and that our consequent inability, on many occasions, either to defend ourselves,

or

or to carry into effect any active measure against our enemies in that quarter, depends less on the noxious power of the climate, than on an obstinate adherence to a custom unfashioned by the approbation of any man who has reflected on it, and which, in peace and in war, is equally detrimental to the interest of Great Britain. The following fact, communicated (as I have been told) by Dr. Wright, formerly of Jamaica, to Mr. John Hunter, will prove, that even in a time of profound peace, when no great fatigue or hardships are to be suffered, and in an old regiment, the mortality among soldiers in the West Indies may sometimes be nearly equal to what it is in time of war. The 23d regiment landed 424 men in a West India island. From the year 1765 to 1768, the loss by disease amounted to 206, or nearly one half of the regiment: but if we consider the number of men in every regiment, who, although they do not die, are yet, by various complaints, rendered unfit for service, we may safely estimate the annual loss at nearly one third of the whole number. If the same mortality happened among the same number of the natives of Britain, engaged in other professions in the West Indies, those islands

would long since have ceased to be valuable to this country.

The only objections that we have heard offered against the means we have advised, for preserving the health of soldiers, is, the difficulty of carrying them into execution, and particularly the inconvenience which must attend the supplying the army with the necessary quantity of malt liquor. But those difficulties and inconveniences ought to be of a very formidable nature, if we dare not encounter them to obtain so desirable a purpose as the preserving the health and the lives of our countrymen, and the rendering our forces abroad adequate to the purpose for which they are paid and supported by the nation. Ignorance and indolence may cry out against the means we have proposed, and in favour of the established mode; the danger of innovation may be urged, and the incompetency of the means to the end to be obtained; the expence of freighting a greater number of transports on account of Government may also be insisted on; but we cannot imagine one argument in favour of the present mode of victualling our army, which any man of reason and common sense may not refute, whether:



whether he is of the medical profession or not. If an enlightened nation is to be influenced by such arguments, it deserves every loss which ignorance, prejudice, and obstinacy can occasion. Perhaps no additional number of transports may be necessary, but even if it should be so, vessels of that description may certainly be employed with more advantage to the state in supplying its troops with the means of preserving health, than as they frequently are, in carrying out large bodies of newly-raised recruits to repair the shattered state of the regiments in the West India islands, or in bringing back to their native country those who are rendered unserviceable by disease.

While the senate of Britain echoes with the energetic voice of wounded humanity against the misery and oppression of our fellow-creatures in Asia and in Africa, let us contract a little the circle of our compassion, and direct its rays more forcibly to the situation of those who have a stronger claim on our attention and regard. Though a private soldier may often be taken from the dregs of society, he is not only our fellow-creature, but he is our countryman, and a free member of a free state. The seeds of honour, of courage, of generosity and

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humanity,

humanity, which Heaven with an impartial hand scatters equally on the breast of the humble and exalted, may for a time be prevented from germinating by the pressure of vice imposed on his unexpanded mind by the wretches with whom he associates, and to whom, on the very threshold of life, he was introduced by Poverty and Misery, the parents from whom he sprung. But, after being a short time in the army, his natural character begins to expand. Circumstances occur to call forth the good qualities of which his mind is possessed. If he has the good fortune to be placed under the command of an officer of humanity and discernment, the growth of them is cherished, and he insensibly acquires a laudable pride, which supplies the absence of many good qualities, even in the worst-regulated minds, and, by restraining him from mean or vicious actions, gives, in time, not only the semblance but the reality of virtue. He acquires the character of his profession, and often, by degrees, loses that by which he was formerly distinguished. If this is the case with many who are taken from the refuse of society, how much greater claim have those young men on the protection of their country, who from various motives enter voluntarily into the  
army,

army, are the sons of parents respectable in their line, and have received an education suited to their station in life? Every attention has been paid to the preserving the lives and health of seamen, and every means, which experience or reason has suggested for that purpose, has been adopted: and what have been the consequences? Compare the voyages of my Lord Anson and Captain Cook. It is well known, that the object of his Lordship's expedition was in a great measure defeated by the mortality in the Squadron under his command; and it is also known, that Captain Cook sailed round the world, with the loss of only one man, who was in a bad state of health when the ship left England. In examining the loss of men, which any of our circum-navigators have experienced for the last twenty years, it will be found rarely to exceed the number of those who, in the common course of nature, might have died in their own country. We have not heard that, in any of the ships which have of late years returned from voyages of discovery, any number of men has been rendered by disease 'unable, if their circumstances required it, to follow their usual occupation. Those men have passed through many climates, and endured many hardships;

yet

yet they have returned, in general, in as good a state of health as when they departed from this country. By what means has this desirable blessing been obtained? By attending to the information, and availing ourselves of the experience of men, whose good sense discovered, and whose patriotism pointed out the means of saving British seamen from the devastation of disease, the only enemy they are unable, or dread, to encounter. Forty years ago, we could not send a ship to the East Indies, without often being deprived of one half of the crew, either by death, or by diseases which rendered the men unfit for service. Now, by the prudence and by the attention of our naval officers, directed by good sense, in using the means for preserving the health of their men, the coasts of Asia, Africa, and America, the coasts of every island, in every sea, and in every climate, have been explored and examined, without sailors suffering much more from disease, than if they had been employed only in cruizing in the British channel.

We have had several books written on the diseases of the army, containing observations equally applicable to the treatment of the same diseases among any other description of men.

men. But the peculiar causes which ruin the health of the British army in the West Indies, so far as I know, have neither been fully stated, nor has any attempt been made effectually to remove them. While a proper and laudable attention is paid to one part of the strength of the empire, I again repeat, that it is not consistent with wise policy, nor with humanity, to proscribe the other. The situation of the natives of Asia and of Africa has long engaged the attention of this country. The lustre of that humanity is too glaring for the contemplation of the mind's eye, and leads sober reason to doubt its sincerity, which, overlooking relations, countrymen, and friends, seeks to exercise itself on the frequently imaginary, though sometimes real, distresses of strangers, which it seldom has the means to alleviate, and never can have the power to remove. I admire the sentiment of the dramatic poet—  
“ *Homo sum, Humani nihil a me alienum puto,*” and I wish it engraved on the breast of every human being: but in private life we seldom admire the judgement or humanity of that man, who, neglecting those to whom he is attached by the ties of nature and blood, dies, and bequeaths his fortune to the endowment



ment of a college or the maintenance of an hospital.

We now conclude this inquiry, by expressing a hope, that some of the observations it contains may excite the attention of other persons to a farther consideration of a subject so interesting to every man who wishes well, either to the prosperity of his country or to the cause of humanity. If, in consequence thereof, the life of a single soldier shall be preserved, or his situation, when on service, shall be rendered more comfortable, the object of the author will be fully attained. Some of the happiest years of his life were spent in the army, and he is still interested in every thing that relates to the welfare or happiness of the profession.

## A P P E N D I X.

## NOTES AND ILLUSTRATIONS.

NOTE A. Page 3d.

*Expence of sending a soldier to the West Indies—  
Yielding Gibraltar for the Canary Islands.*

THE regiments which sailed with Commodore Walsingham, in the year 1780, were six months on board of transports, from the time of their embarkation to that of their landing in Jamaica. I am not acquainted with the manner in which transports are hired; but I suppose that those could not be employed for a shorter space than nine months. The establishment of each regiment was about 700 rank and file; two tons are commonly allowed for each man, at a different rate, according to circumstances, but we will estimate the price at twelve shillings the ton per month. I have not at present an opportunity of obtaining certain information on this subject, therefore the following statement cannot be supposed to be minutely accurate; yet it may give a general idea of the sum which it  
cost

cost Government to send a foldier to the West Indies during the late war.

700 men, at two tons of shipping each, require 1400 tons; the expence of which, at 12s. per ton per month, amounts to £.840 per month, or for nine months, to £.7560.

The expence of transport hire

for each man was therefore £. 10 16 0

Six months provisions, 182 days,

at one shilling per day, - 9 2 0

Pay for 182 days, at six pence

per day, £4. 11s.: deduct 2d $\frac{1}{2}$

per day, stopped by Govern-

ment for provisions, there re-

mains, - - 2 13 1

Insurance of transport, cloath-

ing, blankets, hospital bed-

ding, medicines, wine, and

contingencies, I estimate at

(for six months) - 10 0 0

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Total, — £. 32 11 1

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This estimate, so far from being extravagant, is greatly within bounds. I have not included the levy money of those men, and I am well informed, that, especially when rum is served out, the daily allowance of provisions

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for each man costs Government considerably more than a shilling. However, I speak here with becoming diffidence, having neither sufficient experience nor information to justify me in giving a decided opinion on this subject. I have offered this estimate, which, though perhaps not accurate, is (I have reason to believe) moderate, with a view to excite others, who, from their superior knowledge of matters of this kind, may be competent, to form a just calculation. Yet even from the statement we have given, the inaccuracy of which, perhaps, consists chiefly in its moderation, every man may determine the loss which the nation sustains by the death of a private soldier in the West Indies, and consequently, excluding every idea of humanity, how important it is, in point of national economy, that neither inconvenience, nor apparent difficulties, should prevent us from adopting any mode, which, when carefully considered, may be likely to preserve the health of the British army in that part of the empire. If the nation pays only £. 20 for the landing a soldier in a West India island, and if that soldier dies soon after his arrival, he must be replaced by another, who must be sent from Britain at the same expence: yet the same causes which contributed

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to occasion the death of the former, will equally operate in destroying the other, and thus the expence to the community goes on “ ad infinitum.”

Since I began this note, I have had a conversation with a very worthy and intelligent merchant \* in the city of London, on the subject of this inquiry, some particulars of which, perhaps, are not unworthy of attention. It is well known, that although, in time of war, Gibraltar is, in the opinion of some people, an useful possession to this country, yet, while we are at peace with Spain, it is maintained at a most enormous expence, for which it is incapable of making the smallest return. The light in which this fortress is viewed by Spain is evident, from the amazing exertions she made, during the late war, to get possession of it. It is not only, when considered in every point of view, more useful to Spain than to this kingdom ; but its being held by foreigners is considered by the Spanish nation as a disgrace, which they are anxious and ready to remove by the sacrifice of some other part of

\* John Pasley, Esq; who resided upwards of twenty years in the Canary Islands, and who is minutely acquainted with every circumstance relating to them.



their dominions. The keeping possession of Gibraltar has long been considered by Great Britain as a point of honour; and there can be no doubt, that, on every occasion, the honour of a nation, as of individuals, ought to be maintained, even although its real interests may eventually suffer by the support. But if the interests of a nation can be promoted without staining its honour, a wise and diligent minister will be happy to embrace the opportunity. Many advantages may accrue to Great Britain, from ceding Gibraltar to Spain, for the possession of the Canary Islands. These islands produce all the commodities of the West Indies; and they produce, moreover, wine (little inferior to Madeira) in great abundance, which the West India islands do not. they contain about 200,000 inhabitants; and the climate (latitude  $28^{\circ}$ ) is perhaps the most salubrious in the universe. Except Teneriffe, they produce corn in sufficient quantity, not only for the use of the inhabitants, but in good years for exportation. The many advantages that may arise to this country, from the possession of those islands, considered either in a commercial or political view, are too evident to require being pointed out. In peace, they would amply repay any expence

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that might be incurred for their protection during the time of war. Their utility may be farther experienced, as affording (to use a vulgar, but expressive phrase) a half-way house for the troops intended to garrison our West India islands. If it has been customary to station the artillery-men, destined for the West Indies, for some time at Gibraltar, with the view of seasoning them (as it is called) to a warm climate, how much more efficaciously may that object be obtained, by quartering them in the Canary Islands? The advantages which, even in time of war, Gibraltar produces to this country, are problematical; the expence of maintaining it, whether in war or peace, is certain. In the late war, when two British armies were compelled to surrender to our enemies, when our islands were every day falling into their hands, owing to the want of troops to defend them, when (to use the words of Mr Pitt) "*new levies could scarcely be torn, on any terms, from this depopulated country* \*," when the weakness of our military force prevented us from taking any active or offensive measure against the possessions of the house of Bourbon, upwards of five

\* See Parliamentary Register, Mr. Pitt's Speech, 14th February, 1783.

thousand gallant men were pent up in the fortrefs of Gibraltar, defending a barren rock, which drains the revenue, and distracts the force of this country, merely for the purpose of gratifying a silly, though national, vanity. The existence of the naval power of England was risked to supply those men with the common necessaries of life. Indeed, from that country, on which their behaviour had conferred the highest honour, they merited more than common exertions for their relief. But the heroism and magnanimity of British troops were too well known by France and by Spain, to have required their exertion at Gibraltar, as a confirmation of the solidity of the basis on which they are founded.

However greatly the parting with Gibraltar may be repugnant to the prejudices of the British nation, yet if, by yielding it, we can obtain possession of the Canary Islands, it is a *commutation* devoutly to be wished by every man who desires to promote the interest of his country, without injuring its honour. If an exchange of this kind ever takes place, the subjection of these islands to Britain should be guaranteed both by France and Spain, in case of any future rupture with the house of Bourbon. This may be of more than nominal ini-

portance, as, from the present enlightened state of France, it is probable that the violation of treaties, with which that kingdom has been so often reproached, may in future not form so distinguishing a trait of its national character. I forbear to insist farther on this subject, as although it may tend to promote, it is not immediately connected with the purpose of this work \*.

## NOTE

\* Were the discussion of a political question admissible in a work of this kind, many very forcible arguments might be urged in favour of the scheme hinted at above. Yet, I may be allowed to mention, what has been asserted on very respectable authority, that the principal, if not the sole causes of Spain having interfered in the late war were, the supposed inability of this country to protect Gibraltar; and the general wish of the Spaniards to remove (what is considered as) a national stigma, by wresting that fortress from Great Britain. The trade between England and Spain is mutually advantageous, yet, while we keep possession of Gibraltar, it is liable to many interruptions, detrimental to individuals and to the state. The high mind of a true Castilian is more apt to be influenced by a sense of national honour, than by the considerations of national interest. It must, therefore, always happen, that whenever a favourable opportunity offers, that is, when this country is at war with any other power, Spain will find a pretext for taking up arms against Great Britain, and consequently the advantages will be sacrificed which might result from an amicable connexion between England and Spain, not more conducive

## NOTE B. Page 16.

*Soldiers selling Provisions.*

It was said in the context, that soldiers frequently exchange their provisions for new rum; a quart of which may at all times be procured, especially in the country, for a piece of salted beef, or pork. The following anecdotes are mentioned (among many others that can be produced), in illustration of the fact. Some military officers were sitting, one morning after breakfast, at the door of the coffee-house in Kingston, when a sailor, in a state of intoxication, came up to them, and, waving a case-bottle over his head, exclaimed, "*Damme, boys, this is the country for a man to live in! I can get drunk for a bit, and still have rum in the bottle.*" A bit is something less than sixpence sterling. The man staggered away; what became of him I do not know; but the probability is, that he did not *live long* in the country he thus extolled. A

conducive to the interest of the Governments of these countries than to the happiness and future welfare of a large portion of the human race.



stout healthy soldier, named Mooney, who had long acted as cook to the mess at Port Antonio, was one forenoon found dead in a ditch near the fort, with a case bottle of rum, half emptied, lying by his side. It was conjectured, but it could not be proved, that he obtained the rum in exchange for some kitchen stuff from an huckster in the neighbourhood, who made a practice of supplying the soldiers with rum on every occasion, in exchange for their provisions. This huckster, by the distribution of spirituous liquors for his own purposes, succeeded in exciting a mutiny among our troops at that quarter. He kept a store, which contained provisions of different kinds. The men, for some time, had been at short allowance, owing to a failure of supply from Kingston. One night, when a number of them were assembled at the house of this rascal, out of revenge for our not purchasing provisions from him, he informed the men, when they were inflamed with liquor, that their being at short allowance was owing to their officers, who had received money from Kingston to purchase provisions, but had applied it in procuring wine and other articles, for their own use. The men mutinied; but in consequence of  
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the firmness and spirit of their officers, the mutiny was soon quelled; and there was afterwards more difficulty in preventing them from executing summary vengeance on the fellow whose falsehoods and malice had been the cause of this disturbance. This anecdote may shew what other consequences, besides the loss of health, may result from the excessive use of spirituous liquors.

The rate at which the married men sold their provisions, was as follows :

A pound of salt pork,	-	4 bitts.
A pound of salt beef,	-	3 ditto.
A pound of salt butter,	-	4 ditto.

The married women were allowed,

for washing two shirts,	-	1 ditto.
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These were nearly the average prices. Each child had half, and each woman two-thirds, of a man's allowance. When they had salt fish, they repurchased the butter at the rate of a bit for a table spoonful. They paid at the rate of five pence currency for baking two loaves. The oatmeal was mixed with water, and strained through gauze. This, when boiled, and when of sound quality, afforded a very wholesome breakfast or supper. In Kingston, and Spanish-town, they had fresh provisions twice in the week; but the pur-

pose for which these provisions are granted, is often defeated by the carelessness and gross inattention of those who supply them. When the meat is cut up, it is frequently allowed to remain for a considerable time exposed to the sun, and, consequently, in the course of twenty-four or thirty hours, becomes nearly unfit for use \*. I am informed, that the soldiers wives in Jamaica formerly had an allowance of rum, which was withdrawn, on account of the bad behaviour it occasioned. The money arising from the sale of the salted provisions of a small family is more than sufficient to provide every other article they require : consequently, as married soldiers are better fed, and less apt to be guilty of irregularity than their companions, they constitute in general, as far as my private experience enables me to judge, the healthiest part of every regiment. I except instances, which are to be met with in every corps, of men of dissolute character, united to women as abandoned as themselves, and who ought to be drummed out of the service, to prevent them from corrupting the morals of others. For my information respecting the prices at which the salted provi-

\* See note G.

sions were sold, I am indebted to a person very capable of giving it, who was many years in the army in Jamaica, and on whose veracity I can depend.

## NOTE C. Page 17.

*Soldiers often prefer New to the Old Rum  
allowed by Government.*

The following anecdote is given, in illustration of this fact. A very worthy spirited officer, of the late 79th regiment, commanded a detachment of the army at the island of Rattan, in the Spanish-main. He had some fine old rum, of which, *at the solicitation of his men*, he was persuaded to exchange a puncheon for a puncheon and an half of a newer kind, which they preferred. He did this partly *to gratify the wishes of the soldiers*, whose attachment, circumstanced as he was, it was incumbent on him strongly to conciliate, and also with the view of making his stock hold out for a longer time, as it was uncertain when he might receive a supply from Jamaica. Soon after his return to Kingston, some persons preferred a complaint against him for embezzling the king's stores. A court of enquiry  
was

was ordered to examine the affair, who reported the charge of embezzlement to be totally groundless, and the gentleman was most honourably freed from the imputation of acting in a manner so unbecoming the character of a British officer. It had been alleged that he had put the price of the extra half puncheon into his own pocket. Several non-commissioned officers appeared, who fully refuted so scandalous an allegation; they moreover declared, that *the soldiers were indifferent about the old rum, the mildness of which, when mixed with water, did not make on their palate the impression they desired.*

NOTE E. Page 21.

*Ulcerated Legs among Irish Recruits from the Use of Whisky.*

I have had so many opportunities of making the observation mentioned in the context, that I have not a doubt of its being well founded. Commanding officers of regiments, those who have been on the recruiting service, and especially the army surgeons in Ireland, can vouch for the enormous expence and vexatious trouble proceeding from this source.

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In the 5th regiment, we seldom had fewer than forty or fifty men affected with ulcers of different kinds, and it was uniformly observed, that these were the most irregular, and literally the worst soldiers in the corps. It was in vain the surgeon endeavoured to cure an ulcer in the leg; no sooner did it put on a healing appearance, than, to avoid a return to his duty, the man flew to one of those wretched hovels, too common in Ireland, licenced to sell whisky, and the effects of the anxiety and attention of the surgeon for a month, were there destroyed in an hour. Punishment could produce no amendment in such men, for the effect of it in reforming ceased sooner than the temporary pain it occasioned. The only method of managing these fellows was by not suffering an old ulcer to be a cause of exemption from duty. This was found to be a very useful remedy. Many ulcers, which had long saved a man from any active duty, and which had resisted every means of cure, kindly healed when they were no longer useful. When I first joined the 5th regiment in Ireland, and was uninformed of the frequency of this complaint among the lower classes of people in that country, and of the general use of whisky, the cause which

not only occasions but baffles every attempt to cure it, I reported many recruits fit for service who had no other apparent complaint than a slight ulcer in the leg, which from its appearance did not promise to be troublesome in removing. An army surgeon, who is on good terms with his regiment, will always be ready to put up with a little additional trouble, rather than occasion expence to an officer by the rejection of his recruit for a slight cause. But it soon appeared, that by acting in this manner, not only much useless trouble, anxiety, and expence, were brought on myself, but I was actually doing a material injury to the regiment. On applying to the commanding officer, an order was issued to the recruiting parties not to enlist any man who had *a sore leg*, or *the marks of sores*, as he could not be passed. Consequently the officers who were recruiting in Ireland, who adhered to their instructions, seldom or never sent any men to the regiment, which though somewhat deficient in number, was effective in strength. Other officers, influenced by their zeal, enlisted many men, but the injury, in point of expence, sustained by the rejection of the greater number, pointed out the necessity of adhering more strictly to their instructions.

instructions. Among many instances which can be adduced in proof of this assertion, we mention that of a Lieutenant of the 5th regiment, who marched from Armagh to the head-quarters at Drogheda, with thirteen recruits, eleven of whom were rejected, chiefly on account of fore legs\*. At that time we had several parties in England, from whence we received many recruits, of whom not one in ten was rejected for the same complaint. The officers in Ireland were not less attentive to their duty than those in England, but the men who offered to enlist with the former were almost universally objected to for the cause we have given, while in the latter country, the complaint being not so general, the recruits were less exceptionable. While the use of spirituous liquors prevails in its present excess among the lower classes of people, men with fore legs will be a dead weight on every regiment in Ireland into which they are admitted.

\* This Gentleman having been about fourteen or fifteen months on the recruiting service, in which he was uncommonly active, was obliged to sell his commission to discharge a debt incurred by the desertion and rejection of his recruits.

To those who are unacquainted with the army it may appear extraordinary, that an order should be issued directing officers not to enlist men who had even *the marks of sores on their legs*; but in more instances than I can enumerate, the propriety of the order was apparent. When officers are recruiting in some parts of Ireland, such an order may often be found necessary, both to prevent their own interest and the service from being injured. Recruits, from the southern and western parts of the island, particularly, are commonly indolent and dispirited. This indolence is to be ascribed to moral rather than to physical causes, for in no country in Europe do the lower classes of people possess a greater share of natural *acumen ingenii* than the vulgar Irish. They are averse to labour, and this aversion very probably arises from their being permitted to enjoy only a small portion of the fruits of their labour, owing to low wages, tythes, and exorbitant rents. Many of them, therefore, enter into the army, in the hope of being better clothed and fed, and of being exempted from hard labour. But their expectations are not realised. They soon discover that the being obliged to attend the *drill* several hours in the day, the being subject to the controul  
of

of others, and to punishment for actions which they have not been accustomed to consider as crimes, are circumstances which had not been taken into the estimate they had formed of the ease of a soldier's life. To discover some means, therefore, which may be an excuse for avoiding any duty of fatigue, becomes a principal object of their attention. They feign various complaints, and it often requires a considerable degree of address on the part of the Surgeon to detect the imposition. Detection, however, is commonly followed by desertion, to which they have recourse on finding a military life different from what they supposed it to be; because they have a good stock of necessaries which they can carry with them; and chiefly on account of the protection afforded to deserters by the lower classes of people in most parts of Ireland, which is such as to render any attempt to apprehend them commonly too dangerous to be made by a few individuals. If they do not desert, they employ other arts. As they know that a sore leg is too generally allowed to be a cause of exemption from duty, many of them, who have marks of sores on any part of the inferior extremities, contrive, by various applications, to convert these *cicatrices* into open ulcers.

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It is scarcely credible, although it is an absolute fact, that men often voluntarily inflict upon themselves a severe degree of pain, merely to avoid a slight inconvenience, to which they must submit some time or other, if they intend to remain in the service. I should be suspected of exaggeration, were I to mention the number of instances of this combination of vice and folly that have occurred to me, but they are too numerous to admit of my entertaining a doubt of the fact. It is very common for officers, on rejoining their regiment, after having been on the recruiting service in Ireland, to express their surprize at several of their recruits having been rejected on account of *fore legs*, as they had no such complaints when enlisted, but only a few *marks of sores or wounds*, which the men declared had been occasioned by some slight accident, and were never productive of uneasiness: yet these men, between the period of their enlisting and that of joining the regiment, after being supplied with good cloaths instead of the rags which covered them, shall have contrived to bring their legs into such a state, that a regimental Surgeon (who does his duty) cannot report such men fit for service, nor can a commanding officer admit them into a regiment.

ment. They are, therefore, rejected, and consequently the expence of levy-money (which is commonly laid out in purchasing shirts, shoes, &c.) and of subsistence from the day of the recruit's enlisting till he joins the regiment, falls on the recruiting officer, who is thus made to pay for the villainy of the man whom, in the discharge of his duty, he had enlisted. On this subject I leave the reader to make his own comments, and will only refer to page 141, and to the note subjoined to it.

This species of vice or of folly (I know not by what term it ought to be defined) is not peculiar to Irish recruits; but, so far as my observation goes, (and I have had very many opportunities of observing that) it is more common among recruits from particular parts of Ireland, than among those who are enlisted in Great Britain.

From what has been stated on this subject, the very obvious inference may be drawn, That an officer, if he regards his own interest, ought to be extremely cautious in enlisting men who have *even the marks of wounds* on their legs, until he has obtained some information with regard to their general character; and that regimental Surgeons, who

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wish to avoid much expence, trouble, and anxiety, ought to be equally cautious in reporting such men fit for service.

NOTE F. Page 42.

*Expence of damaged Provisions.*

I am informed that the loss sustained by the condemnation of damaged provisions falls immediately on the Contractor, but ultimately on Government. I have heard of a Contractor's Commissary or Agent in the West Indies, who employed a person to purchase condemned provisions, which he mixed up with others, and again issued them for the use of Government. It is, perhaps, owing to some trick of this kind, that in the same cask of beef or pork different layers are often of a different quality, consisting of some good pieces, and of others very bad. Here the result of design appears to be the effect of accident. Reluctance is felt at condemning a whole cask on account of some bad pieces which are met with now and then, and which perhaps are not complained of, as not being used by the soldiers who receive them. This difference  
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in quality could scarcely happen if the whole contents of the cask were originally of the same quality, and had been cured in the same manner. A few pieces of bad meat may be found in the best assortment of provisions, owing to some defect in the cask, to the manner in which it has been placed, or to accidental inattention; but if they occur frequently, and in different layers of the same cask, so strong a suspicion of fraud may be entertained as to justify the surveyor, not only in condemning but in destroying the whole; such a mode of proceeding might teach a contractor to be particularly attentive to the quality of the meat he supplies, and to the mode of preserving it, as the loss would then inevitably fall on himself, and he could have no means of throwing it on the nation.

NOTE G. Page 53.

*Farther Hints respecting the Mode of preserving Provisions, and of using them when preserved.*

Some of the following remarks were communicated by Captain Forrest, in addition

tion to those with which he had formerly favoured me.

Doctor Wright, formerly of Jamaica, now physician in Edinburgh, some time ago published a paper in the London Medical Journal, on the effects of a combination of sea salt with vegetable acid, as an antiseptic in putrid fevers, and in the putrid sore throat. His experience enables him to recommend this combination as a very useful remedy in those diseases. In fevers, attended with marks of great putrescency, where the nausea was so severe, that the sight of almost every kind of meat or drink was distressing to the patient, I have found the leaf of a lettuce dipped in salt prove a most acceptable and grateful remedy, and on very many occasions I have recommended, with much benefit to patients in a putrid fever, sallad dressed in the manner in which many persons use it, with vinegar and sugar. It allays the thirst and removes that clamminess in the mouth and fauces, and the constant bad taste so common in putrid complaints, more powerfully than any liquid can do. The frequently taking in liquids to quench thirst commonly produces much uneasiness, either by exciting vomiting

and



and increasing the nausea, or by overloading the stomach, and consequently adding to the sense of oppression about the præcordia. These slight observations are given as tending to illustrate the antiseptic powers of vegetable acid combined with marine salt.

Captain Forrest informs me “ that long  
“ before he went to India, he remarked that  
“ the Portuguese preserved fish, cut in small  
“ slices, with a mixture of salt and sugared  
“ tamarinds, of which he commonly carried  
“ a quantity to sea for his own table. Fish  
“ is thus cured by the Portuguese at Calcut-  
“ ta, who make a trade of it, and is named  
“ by them *Pesche*, or *Pescha Molia*. Pre-  
“ served in this manner, it is not found to be  
“ too salt, requiring only to be fried in the  
“ tamarind which covered it, with the addi-  
“ tion of a small quantity of butter.” He  
says, “ the pesche molia is very grateful to the  
“ taste, keeps well, and is found to be a  
“ wholesome article of diet. He has used  
“ tamarinds (freed from the strings and  
“ stones) with salt in preserving meat, and  
“ has found the combination to answer the  
“ purpose much better than salt alone, espe-  
“ cially if some Cayenne pepper be added.  
“ When he did not use tamarinds, he em-  
L 3 “ ployed

“ ployed limes or lemons in the following  
“ manner: An incision being cut in the side  
“ of the lemons, or limes, some salt is in-  
“ troduced, and about the space of twenty-  
“ four hours thereafter, the juice is squeezed  
“ into a cask, or jar, and the fruit being al-  
“ lowed to dry for a few days in the sun, is  
“ then thrown into the cask containing the  
“ juice; some vinegar is added, and with  
“ this pickle (which is named *Achar*, and is  
“ used in the East Indies in a variety of  
“ dishes) meat or fish may be preserved, for  
“ a great length of time, from any approach  
“ to a state of putrefaction.” As tamarinds,  
limes, or lemons, can be procured in great  
abundance in the West Indies, the utility of  
a combination of vegetable acid with marine  
salt, as a preservative of meat, may on many  
occasions be experienced. For it is re-  
marked, in the West Indies, that if meat  
newly killed be allowed to remain for a few  
days in a salt brine, it very soon begins to  
corrupt, and forms a very unwholesome ar-  
ticle of diet.

These observations may perhaps induce  
some person, who has better opportunities  
than I have, to attempt ascertaining, by far-  
ther experiment, the different *preservative*  
power

*power* of sea salt, and of a combination of sea salt with vegetable acid. The ascertaining this point may be of service to the army, and to individuals; for when soldiers in the West Indies have an allowance of fresh provisions, if the quantity served out is not consumed on the day the animal is killed, what remains, for the reasons formerly mentioned, soon begins to spoil; and, unless particular attention is paid to it, within eight and forty hours it often becomes unfit for use. It is therefore usual for persons, even in good circumstances, when they kill a sheep, or a hog, for the whole of which they have no immediate occasion, to send a negro to sell a part of either to their neighbours, and which, if not disposed of in that manner, would be lost.

But if the mixture above-mentioned shall be found to be a better preservative of meat than salt alone (and some forcible arguments can be adduced for supposing that it must be so) a private soldier in a hot climate may often obtain a comfortable and wholesome meal, of which he is at present deprived. The utility of *sour-cROUT*, in which there is a combination of marine salt and vegetable acid, is well known; and although I have not at this time sufficient evidence to justify a decided opi-

nion, yet, from some experiments that have been made, it appears probable, that a mixture of purified marine salt and of vegetable acid, may prove to be a *preservative of meat* preferable to any other that has been employed. I have indisputable proofs that meat *cured* (as the term is) with a mixture of salt and different kinds of spices, is not only better preserved, but is more palatable and more wholesome than that which is cured in the usual manner, with salt alone, or with a mixture of marine salt and salt-petre.

I conclude this note with a hint, that some persons may think worthy of being attended to. A gentleman who usually resides on his estate, at the distance of three hundred miles from the metropolis, and who, being a keen sportsman, has been accustomed to send presents of different kinds of game to London, informed me lately, that the hares, grouse, &c. which were rubbed with salt, were commonly so much spoiled before they were received by his friends, that few persons could use them; and that, when no other means of preserving them were used than carefully washing away the blood, and rubbing the inside of the belly with the common black pepper, he has sent them from  
beyond

beyond Carlisle to Southampton without their being corrupted.

NOTE H. Page 65.

*Punishment of Soldiers.*

One of those instances of punishment deserves notice, on account of the particular circumstances which attended it. A private soldier in the fifth regiment had been repeatedly sentenced by a court-martial to be punished for theft. But the punishment of flogging had always been changed for that of confinement, as on the instant he was brought to the halberds he was attacked with convulsions; and the medical gentlemen who attended, thinking it not proper that in those circumstances the punishment should be inflicted, the man was released. Soon after I joined the regiment, he again committed his old crime of stealing the necessaries of his companions, was again tried, and sentenced to receive three hundred lashes. He was tied up, and, as usual, his convulsions returned, and he was taken down. He was at this time at Dundalk, and I was at the head quarters



ters at Drogheda. As he was an handsome fellow, and an expert soldier, the commanding officer was unwilling to discharge him; at the same time regretting, that the effect of a smart punishment could not be tried to prevent a repetition of a crime for which the man imagined no other punishment than that of a short confinement could be inflicted. I requested that he might be brought to head quarters, and informed the commanding officer, that, as he wished to carry into execution the sentence of the court-martial, I would abide by the consequences. He was accordingly sent under a guard to Drogheda. These convulsive fits were either feigned or real; but in either case it was deemed proper that the punishment should go on. If they were feigned, the pain of the flogging would soon put an end to every exertion of artifice; and if they were real, it appeared probable that severe pain, to which he had not been accustomed, and the operation of terror on his mind at the time the fit was approaching, might prevent the attack, and, by breaking the habit, might prove a useful remedy. I never had seen him in any of these fits; but I was informed that he was frequently attacked by them when guilty of any irregularity,

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larity, and consequently was sent to the hospital, instead of the guard-house. On the morning of his punishment, I informed him, in presence of the serjeant of the hospital and of another person, that the commanding officer was determined to inflict every lash, although death should be the consequence, and that I would, on no account, interfere in having him taken down. He was told, that if he *dared* to fall into fits, the serjeant and my servant had orders to burn him to the bone with red-hot irons, which they kept ready heated for the purpose in the fire of the mess kitchen, at the door of which he was to be punished. While the drummers were tying him to the halberds, I placed myself opposite to him, and his eyes were steadily fixed on mine. His countenance was marked with the strongest signs of terror, which was not lessened by turning his head towards the door of the kitchen, where he saw a person prepared (as he thought) for the purpose of which he had been informed. He firmly believed, that what had been threatened would be executed. The punishment went on; the pain it occasioned was almost forgot in his apprehension of that which he more dreaded. He received three hundred lashes;

lashes; and, while I remained in the regiment, I never heard of his being attacked with any convulsive disorder, nor of his being tried by a court-martial for his old crime.

These circumstances are minutely related, as they may afford a useful hint to medical men, on their first entrance into the army.

The good effects of the excitement of fear, as employed by Doctor Boerhaave, are well known. In this case, whether the fits were real or feigned, impressing the mind with terror produced the effect that was desired. In the treatment of various diseases, among persons of a particular disposition, the same remedy, employed by an attentive physician, will be found often productive of the most unexpected good consequences.

## NOTE I. Page 65.

*The Morals of Soldiers.—Regimental Chaplains.*

I have said, that a private soldier, without a sense of honour, is a licensed ruffian. Those who have been accustomed to entertain an unfavourable opinion of the army, may be surprized to hear of the morals of a private soldier. The unfavourable opinion of those people is founded on prejudice, arising from inaccurate, or from no observation. Were they better informed, they would know that the healthiest soldiers, and the most useful to their country, are men of the best private character; men, who scorn, as much as those in a more elevated station, to be guilty of a mean, an ungenerous, or an inhuman action. An absurd idea has gone abroad, that every vagabond is good enough to be a soldier: I know that this idea has been adopted by many officers, and regulates their conduct in the treatment of their men. He who is doubted, soon acquires the character which suspicion hath affixed to him. I not only deny the possibility of converting the abandoned outcast of a jail into a useful soldier, but I maintain, that the introduction of such wretches into the  
army

army is detrimental to the service, and pernicious to the state. To bear fatigue, the vicissitudes of heat and cold, to endure without murmuring the extremes of hunger and of thirst, to be obedient to their superiors, patient in adversity, courageous in danger, and merciful in victory, are virtues, which, on many occasions, have been exemplified by the conduct of the British army. To expect such an exertion of virtue from the generality of those, who, to gratify inordinate appetites and passions, have set at defiance the laws of their country and their Creator, betrays inconceivable ignorance of human nature. I am well informed, that the injury done to the cause of Britain, in America, by the licentiousness and marauding of a set of ruffians (who were a disgrace to any service) in alienating the minds of the people from this country, was greater than any we sustained from the hostility of France, or the capture of our armies. It is a most mistaken idea, that every man who appears on a parade, cloathed in regimentals, and armed with a musket and bayonet, is a soldier. It is in the hour of danger and of difficulty only that the real soldier is to be known. On those occasions, it often happens that he whose brutal ferocity, when un-  
awed



awed by the fear of punishment, has acquired for him the character of a bold and desperate man, sinks into pusillanimity and cowardice, and becomes a burden on his more respectable companions. Such fellows may, perhaps, be usefully employed in an inhuman predatory expedition, where there is a prospect of gain, and little danger to be encountered. But officers, who, in perilous and distressing circumstances, have been obliged to depend on the dissolute and abandoned, the scum of jails, as a part of their support; who have hoped for, rather than expected, from such persons, unmurmuring endurance of complicated difficulty, have acknowledged that their chief reliance was at last on him, who possessed the pride and the sentiments of an honest man. Men of bad character, whose vices have driven them into the army, will *skulk* as much as possible from encountering any difficulty that must be surmounted; they will often catch an opportunity of deserting, when great or continued exertion is required; for they are not animated with the same spirit which supports others, and having been long accustomed to carry on war against mankind in general, are often incapable or regardless of discriminating their friend from their foe. It is not expected, that

that the British army is to consist of saints or of hypocrites. But as our regiments are frequently recruited from jails, or by men who are dragged from the recesses of the most contorted labyrinths of vice, it is earnestly to be desired that they should be instructed in their duty, not only as soldiers, but as men. It was from a conviction, founded on experience and common sense, of men of bad character being unlikely to form useful soldiers, that chaplains were first appointed to the different regiments in the British service. The chaplains were men of probity and learning, who, instead of bewildering the understanding with the metaphysics of divinity, were enjoined to inculcate on the minds of soldiers the most rigid attention to the performance of duties necessary in their profession; temperance, obedience, patience, fortitude, and humanity.

Every ship of the line, when commissioned, is provided with a chaplain, and a chaplain is also appointed by his Majesty to every regiment of infantry. From the former, except in particular circumstances, constant residence and discharge of duty are expected and enjoined; the attendance of the latter is as uniformly dispensed with. In taking a philosophical view of mankind, it may perhaps appear,

pear, that a chaplain is more likely to be useful to a regiment of soldiers, than to the crew of a man of war. The generality of sailors enter into that profession at a very early period of life, before their natural character is expanded. The reciprocation of kindness, the mutual endurance of danger, the mutual endeavours to avert it, and the zeal, animation, and courage called forth and displayed in these endeavours, combine in forming a professional character. They become a distinct class of men, with virtues and vices in a great measure peculiar to themselves. If it be said, that they have little religion, yet from their short and slight communication with other classes of men, they are not in general much sullied with those vices which render religious exhortation necessary. When on shore, they often contract bad habits by associating with the most profligate female characters, but when necessity or duty compels them to return to their ship, they have not an opportunity of giving way to the habits they have acquired; and, on examining the human heart it will be found, that the propensity to vice is restrained or destroyed by the difficulty or impossibility of gratification. If we compare the army with this class of men, we shall perceive a

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very material difference between them. Young men, though born of poor parents, who have yet been accustomed to habits of industry, and have in their early years received some religious instruction, soon form good soldiers. But in most regiments, especially in those newly raised, there are many men of a very opposite description. Men born in poverty, nursed in ignorance, and regularly trained to a systematic practice of vice. Such men are commonly found among recruits that have been enlisted in large towns. Wherever those men are quartered, they find out, and associate with, persons as abandoned as themselves, and not only persevere in their old courses, but corrupt by their example young men unexperienced in vice. They become insensible to shame and indifferent to punishment. When their character becomes notorious in one regiment, they desert, and enlist in another. Though they carry the marks of punishment on their backs, yet they never fail to ascribe those marks to a blister, a burn, or any other than the real cause; and, as in the absence of the regimental surgeon, or when they enlist with a recruiting party, they are examined by a surgeon, who, from want of experience, is incapable, or is inattentive accurately to distinguish

tinguish between the appearances occasioned by a punishment and the cause they assign, they are consequently reported fit for service, and are again enlisted, again to desert when their situation becomes irksome and their character known. It is such men who occasion reflections to be thrown out against the service, for a few of them in a regiment often injures the character of the whole. It was the licentious and unrestrainable conduct of individuals in the British army in America that alienated from the cause of this country the minds of many who were wavering, and of many who were well affected. They not only lead their associates astray, but they corrupt the minds of young men in every town in which they are quartered. A private soldier is allowed a certain sum of money for every recruit whom he brings to the regiment, and it is a general remark, that the greatest number of recruits is brought by soldiers of the most dissolute character. They endeavour and succeed in ingratiating themselves with a young unthinking boy, whom they deem likely to answer their purpose; he is plied with spirituous liquors till he is intoxicated, and is then persuaded to enlist. On the return of sobriety and reflection, the poor lad sees in the utmost



extent the consequences of that error of which in the hour of forced intoxication he had been guilty. In vain he wishes to return to his former occupation; for these vagabonds, who call themselves soldiers, before he could recover the common powers of his understanding, have had him examined by a surgeon, and attested by a magistrate. But before attestation he has it in his power to be released from enlistment on paying twenty shillings to those who ensnared him; a swindling forfeiture, sanctioned by a law disgraceful to a nation which boasts of protecting the property and liberty of men.

If the young man has not twenty shillings, or cannot immediately procure that sum, he must be a soldier. What kind of a soldier a man, thus enlisted, is likely to prove, let those who are acquainted with the army and with human nature determine. Can he be blamed for desertion, and for endeavouring to retrieve the advantages of which his folly has deprived him? There is no man of reflection who will answer in the affirmative. But what punishment do those villains deserve, who by inveigling young unexperienced boys, not only injure the recruiting service, but bring disgrace on the army in general? Considered  
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by the eye either of policy or humanity, it might be better to want recruits than to obtain them by such means, when no particular national emergency renders them necessary. It might be honourable to the service and beneficial to the state, either to expel from the army men of the character I have described, or to attempt their reformation. But reformation is never to be obtained by punishment. For if the injudiciously inflicting a punishment for a slight offence, which inadvertency has occasioned, frequently breaks the spirit of a good soldier, it very commonly renders a bad man worse. It is equally in vain to expect reformation from their regular attendance on divine worship. Their minds are so uncultivated that they are incapable of acquiring one idea from what they hear delivered. They require a particular instructor, a man of sense and humanity, who, in language adapted to their understanding, and in a manner which may conciliate their attention and esteem, can instruct them in the knowledge of the leading principles of Christianity, can inculcate on their minds the importance and utility to themselves of regularly discharging the duties of their station, and can impress them with general notions of

moral and religious obligation. Perhaps this is all the religion that is necessary; but it is absolutely necessary to make good soldiers of such men as I have described. But soldiers have some difficulty in acquiring even this small portion of it. The reverend Mr. Brown, late chaplain to the 21st regiment, was the only instance I knew, during my acquaintance with the service, of an officer, so useful to a regiment, regularly attending his duty. There may be others, but I never met with any, nor have I heard of another, except the chaplain of the 42d regiment, (who, I am informed, attends his duty like every other officer in the corps,) and the reverend Mr. Brudenell, who so conspicuously distinguished himself by his calm and intrepid behaviour at the funeral of the late Brigadier General Frazer at Saratoga.

To some of my readers it may appear, that in this note I have been too minute; but they may probably be of a different opinion when they examine well the importance of the subject we have been considering. I conclude it by observing, that some attention to the morals of soldiers, if we expect them to be really useful to their country, is as necessary as to the means of preserving their health;

health; and that the assistance of the chaplain may very frequently render the advice of the surgeon unnecessary. I repeat, that the most healthy and most useful soldiers are in general men of the least blemished character; the reverse of the observation will be found equally true in every regiment of infantry in the service.

NOTE K. Page 93.

*Sending newly-raised Troops to the West Indies.*

Independent of the general unfitness of newly-raised troops for actual service in the West Indies, certain circumstances sometimes occur to render them still more ineffective. The following short account of the 94th regiment, with which I was more particularly connected, may give a general idea of the state of some others that were sent to the West India islands during the late war.

The 94th regiment was embodied on the 2d March, 1780 (at least on that day the commissions were dated) and embarked at Plymouth for the West Indies on the 4th or 5th of the same month. I joined on the 16th,

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and found indeed a very motly groupe of men, the greater part rather resembling patients dismissed from an hospital, after long confinement, than men destined to act against the settlements of Spain in the gulph of Mexico. The small-pox, measles, jail fever, and dysentery, raged among them with uncommon violence, owing to their want of exercise, to their being almost constantly between decks on account of the rigour of the season, and to a despondency arising from their being unable to brook confinement, circumstanced as they were at that particular time. The regiment was embarked in five transports, and every transport was more or less an hospital. When I joined, the men were attended by Mr. Geach, surgeon to the Royal Hospital at Plymouth, who, I dare say, well remembers the circumstances I now mention. In an old miserable house near the bridge, the only place that could be procured as an hospital on shore, there were forty or fifty men in the most loathsome and offensive situation that can be imagined, threatening disease and death to every person who approached them. As the regiment was embarked so suddenly after being embodied, it was generally believed that the  
transports



transports would immediately fail; and as the privates consisted of men of every age, and of every description, a suspicion was entertained of the whole; and lest he should desert, no man was allowed to go on shore except servants and non-commissioned officers. In this situation the men remained confined on board of transports, from the 5th of March to the 9th of April, within two hundred yards of the shore of England. Their condition, indeed, rather resembled that of convicts who had violated the laws, than of men destined to avenge the injuries of their country. On the 9th of April, Commodore Walsingham's fleet, with the 85th and 93d regiments, appeared off Plymouth, and was immediately joined by ten sail of transports, containing the 92d and 94th.—We got down the Channel, but were obliged to return to Torbay, where we remained seven weeks, before we sailed to Jamaica. As no time had been allowed for training the men, the state of discipline in which the generality of them were, may be easily supposed. The fleet reached Jamaica on the 1st of August, and on the 23d the flank companies landed, and encamped at Castile Fort, perhaps the most unhealthy spot in the island.

island. The battalion landed in a few days after, and marched to Spanish Town (about thirteen miles) where it was quartered in the theatre. The men were extremely sickly; many were affected in a high degree with the sea scurvy; fevers and fluxes prevailed universally, and in Spanish Town there was no other hospital to receive them than a small crazy cottage, which we were obliged to hire for the purpose, from a free negro, and which could not accommodate a fourth part of our sick men. In less than a year and a half, not one third part of the number remained, of which the regiment was said originally to consist. The 93d regiment was in a still worse situation, being drafted within six months after its arrival in the island. The 85th and 92d regiments consisted each of a good body of men; as, having been raised some time previous to their embarkation, my Lord Harrington, and the hon. Col. Wortley Stuart, who commanded these regiments, with an eager, laudable, and becoming zeal, embraced the opportunity of discharging their bad recruits, and of supplying their battalions with healthy young men, regardless of the private expence incurred to procure them. Yet I am sorry to  
say,

say, that the mortality in the 85th and 92d, was nearly as great as in the 93d or 94th regiments: the causes which led to that mortality will be apparent to him who reflects on the peculiar circumstances in which these regiments were placed. From a due consideration of these circumstances, we may be justified in observing, that when new regiments must be sent to the West Indies, too great care cannot be taken to keep them as short a time as possible on board of ship, and to have proper hospitals and barracks for their reception on their arrival in that country.

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SINCE this work was sent to the press, a melancholy opportunity has occurred of paying the tribute of my gratitude and respect to the memory of a brave, intelligent, and humane officer, to whose character I alluded in page 81, and who commanded in Jamaica during several years of the late war.

Of Sir Archibald Campbell, whose ear was never open to the voice of flattery, and is now for ever closed, the pen of gratitude may record, that he has left an example worthy of  
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being imitated by every officer in the British army. In him, to the most gentle manners was united a brave and noble heart. With fewer failings than most men, he possessed, in an uncommon degree, the *suaviter in modo, et fortiter in re*. Industrious and indefatigable in the pursuit of whatever related to the advancement of military knowledge, he was yet always easy of access, except when affairs of weight engaged his whole attention and his time. Conscious of real dignity of character, he scorned to wrap himself up in the often assumed, but despised, importance of some men who have no other merit to boast than their rank in the service, though obtained by means not always the most honourable. He possessed the rare talent of enhancing the value of a favour by his manner of conferring it, and he who solicited a favour, which could not, with propriety, be granted, forgot the disappointment in admiration of the manner in which it was refused. He granted as a prince, and refused as a friend. The private soldier who served under Sir Archibald Campbell shrunk not away, but rejoiced at his approach; for he took an interest in every thing that related to the comfort or welfare of those whom he commanded.

manded. The unfeigned esteem which his officers felt for him, was repaid by the sincerity of a sensible adviser, and by the kindness of a disinterested friend.

The memory of a man whose life was spent in the service of his country, and was replete with honour, I hope will be long respected by Great Britain. For he had acquired that reputation in which alone true glory consists, which every virtuous man in public life is ambitious to gain, and which, as defined by Cicero, *est illustris ac pervagata multorum et magnorum vel in suos, vel in patriam, vel in omne genus hominum fama meritorum* \*.

This is not the language of panegyric, but it is that of truth. A lively and grateful recollection of kindness bestowed on me, many years ago, when under his command, may have drawn forth expressions which, were he alive, I would not use, lest the delicacy attending superior merit might be wounded even by this feeble tribute of respect to a man, who was (in the just acceptation of the phrase) A SOLDIER.

\* Cicero Orat. pro M. Marcello.



*Error in the Mode of enlisting Roman Catholics.*

The following observations should have been inserted at the end of the note, *On the morals of Soldiers*, page 167; but, the Manuscript having been mislaid till it was too late to correct the error, the Author requests the Reader to excuse their being introduced here.

The prejudices of individuals are sometimes removed by pointing out the fallacy from which they have arisen, and the weakness of the arguments by which they are supported. But the prejudice of the many who constitute a government is of a more inveterate nature; *vires acquirit eundo*. While individuals, from errors in their conduct, generally derive experience, by which, in future, they may be avoided, some governments attempt to justify error by perseverance in the practice of it. In such governments, as wave follows wave, so each Administration follows the example of that which preceded. Men, terrified at the imaginary danger of innovation, permit those spots to remain which defile the fair face of a constitution, which conceal its beauties from  
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the eye of reason, and which are regarded with veneration surpassing even monkish bigotry.

As, by a law of this kingdom, Roman Catholics are excluded from serving in the army, every man who enlists is therefore obliged to swear that he is of the Protestant religion. But it is a well-ascertained fact, that at least one half of the number of those who enlist in Ireland are of the Romish persuasion. No person will venture to assert that these men, in general, as soldiers are inferior in any point of view to Protestants, nor can any sound argument be urged why they should be less calculated to serve their country in a military capacity than those who profess the reformed religion. When Irish Catholics enter into the army, they are obliged to attend divine worship according to the rites of the established church. This, to men of nice consciences, is a matter of some consequence; but it is not much regarded, because the lesser crime is swallowed up in the greater. When they enlisted, they took an oath that they were Protestants; but they might with equal truth have sworn that they were Turks or Gentoos: indeed, it would have been a matter of equal consequence; for, while a man does his duty as a soldier, and is sober, honest, and obedient,

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it is seldom enquired whether he says his prayers in a mass-house or a mosque. But what shall be said of a law that promotes wilful perjury? What opinion shall we form of that wisdom, which in one instance punishes perjury with deserved severity, and connives at it in another? What tie can be had on a man who swears fidelity to his prince, at the very instant he is blaspheming his God; who is obliged to act thus before he can be legally empowered to raise his arm in defence of his country? Let the reader speak of such wisdom as it deserves; for my part I am unable: yet I am not surprised at the frequency of desertion from the army on the establishment of Ireland.

If it is believed that Roman Catholics hold principles inimical to our constitution, and therefore that the oath, as prescribed by law to be taken, is necessary to prevent their admission into the army, what good reason can be given for the violation of that law not being punished with the same severity as the breach of any other? Some reasons may be given, which militate strongly against the wisdom of Government in allowing such laws to exist. That Roman Catholics entertain principles inimical to a free constitution will not, at this day,

day, be easily credited by any man of common sense, or of common observation. If then no injury has arisen, or, from what we have experienced, is likely to arise, from enlisting Roman Catholics, let that part of the oath be abolished which obliges a man to swear that he is a Protestant, and let not perjury be any longer the passport of admission into the British army. In an age not abounding in religion, a wise government ought perhaps to be contented with knowing that its subjects worship the Supreme Being, the common Father of all, without depriving itself of the assistance of three millions of men, by an ill-judged and rigorous inquiry into the manner in which that worship is conducted. At present, to obtain the assistance of those men, even in time of peace, but particularly on any national emergency, the state unwisely connives at a violation subversive of the pillar of moral rectitude. A man of plain understanding cannot discriminate the case in which the violation of a solemn oath merits punishment, from that in which it is not considered as a crime. But it is hoped that the period is not far distant when cruel, absurd, and impolitic laws shall not be permitted to insult the understanding, or to wound the consciences of Englishmen: when an enlight-

tened nation shall perceive its error in driving British subjects into the armies of foreign powers; or in compelling, by oppressive, and now unnecessary regulations, valuable citizens to desert their country, and to exercise their talents and their industry for the benefit of the rivals of this kingdom. Shall the defence of so valuable a part of the British empire, as its possessions in Asia, be, in a great measure, entrusted to men who are neither Protestants nor Christians; and shall an Englishman or an Irishman be prevented by law from drawing his sword in defence of that country in which he was born, which contains his property, and to the support of which he amply contributes, merely because he is a Christian worshipping the Deity after the manner of his fathers? Shall an infamous vagabond, unacquainted with every principle of religion, who has been tried at the Old Bailey and convicted of various acts of depredation on society, be exempted from the punishment due to his crimes, provided he agrees to serve his Majesty as a soldier; and, shall a Roman Catholic, however virtuous, however respectable a subject of Britain, be prevented from entering into the service of his country, because he believes in the doctrine of *transubstantiation*, in



proportion to the reverence which every sensible Episcopalian entertains for that very *wise, pious, and charitable*, though rather *enigmatical* compound, *the Athanasian Creed*? If he wishes to serve his king, must he disclaim every obligation of religion, by going through the ceremony of perjuring himself, in calling on the Deity to witness that he is not of that faith in the practice of which he has been brought up, and to which in his mind he adheres? I forbear to insist on this subject farther than observing, that it is not consistent with the manly sense of an enlightened people to adopt, in their practice, what they condemn by their laws. I may be allowed, with many others, to express my sincere wish that the hour may soon arrive when mankind shall believe that virtue can exist beyond the pale of the tenets and forms of any particular sect: when a British subject shall be allowed to worship his God in the manner he prefers, without having “a mark set upon him,” by being deprived of the privileges to which he ought to be entitled as a free citizen of a state which calls itself free: when reason and humanity, bursting into the recesses of political and religious bigotry, shall wrest from their grasp that sceptre with which they have too long swayed the world.

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I NOW conclude this treatise, in the hope that the motive which impelled me to undertake it, may be an apology for any deficiency in the execution of it. It was written amidst frequent interruptions, and in different circumstances, both of health and spirits. Having engaged in it, I thought it my duty to state at some length the observations, of which my own experience, and that of others, had put me in possession. I have stated facts which I can substantiate, and I have pointed out (what appear to me to be) errors; and the consequences resulting from them, with an earnest desire to be of service to the community.

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